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KLEINFELDER

OCTOBER 1987
QUARTERLY SAMPLING REPORT
SOUTHERN CALIFORNIA CHEMICAL
SANTA FE SPRINGS, CALIFORNIA

01-14-88

December, 1987

Prepared by:

KLEINFELDER

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KLEINFELDER

January 14, 1987
File: 50-1014-03

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Room 4027
Los Angeles, California 90012-4596

Attention: Mr. Hank Yacoub

Subject: Southern California Chemical Quarterly Sampling - October, 1987

Dear Mr. Yacoub:

Attached to this letter is our quarterly sampling report of the Southern California Chemical Co., Inc., Santa Fe Springs facility. The report presents the results of analyses of water samples and water level measurements obtained on October 9, 13, and 15, 1987 from the onsite monitoring wells. This report also contains sampling protocols used during sampling and analysis.

We trust the information presented in the report meets your needs at this time. Should you have any questions, please feel free to contact us at your convenience.

Very truly yours,

KLEINFELDER

Kenneth L. Durand
Hydrogeologist

Brian Villalobos, R.G. 4153
Senior Hydrogeologist

KLD:BV:cmg

cc: Bud Torrance
John Leo
Mark Vest
Jim Breitlow

1 INTRODUCTION

Presented in this report is a summary of laboratory analyses of water samples and water level measurements obtained during October 9, 13, and 15, 1987 from Southern California Chemical Co., Inc. groundwater monitoring wells. Included for comparison are the results of our previous water samplings.

Groundwater sampling began in February, 1985 to assess and mitigate a chromium and cadmium plume located in the vicinity of monitoring well MW-4 (see Plate 2). A quarterly groundwater sampling program was initiated in March of 1986. The purpose of the quarterly sampling program is to establish a data base for monitoring the compounds in the groundwater beneath the site. The most important aspects of this program are (a) assessment of location and concentration of the chromium and cadmium plume; (b) detection and evaluation of water quality changes; and (c) characterization of background water quality.

This report presents the data obtained from the seventh quarterly sampling interval conducted in October 1987 and all previous sampling data. The original laboratory reports and chain of custody records of the October 1987 sampling are included in the Appendices. The eighth quarterly sampling is scheduled for February 1988 with a report to the Regional Water Quality Control Board to follow in March 1988.

2 MONITORING WELL SAMPLING

Sampling was performed by a **KLEINFELDER** environmental technician using the Mark Series I groundwater sampling vehicle.

All wells are measured for static water level prior to sampling. The wells were purged and sampled by using an air-activated submersible pump (bladder pump). To minimize the potential for cross-contamination, the pump and sample lines were thoroughly decontaminated before sampling and between wells, as described in Appendix A.

A total of twelve monitoring wells were sampled as part of this program. Eleven of the twelve wells sample groundwater from the uppermost portion of the first aquifer beneath the site. Well MW 4A is perforated in the lowest portion of the same aquifer.

As customary, the Regional Water Quality Control Board was notified prior to sampling and was provided the opportunity to observe sampling and to collect duplicate or split samples.

3 LABORATORY TESTING

Analytical testing was performed by Brown and Caldwell Laboratories of Pasadena, California. Quality assurance testing was provided by Analytical Technologies, Inc. of San Diego, California.

Laboratory testing for the October 1987 quarterly sampling consisted of analyzing a total of about 332 water samples. The primary laboratory, Brown & Caldwell Laboratories, analyzed 312 monitoring well samples, 8 quality control samples, and 2 spiked samples. The quality assurance laboratory, Analytical Technologies, Inc., analyzed 8 split monitoring well samples, and 2 spiked samples. Spike samples were provided by Chemical Research Laboratory of Garden Grove, California.

The results of the testing are summarized and presented in Tables 1 through 12. Individual test results are included in Appendix B and Chain-of-Custody records are included in Appendix C.

4 QUALITY CONTROL

To monitor the validity of the chemical data, the following quality assurance measures were employed.

4.1 DUPLICATE SAMPLES

Duplicate samples were taken at each sampling site. This ensures that if breakage or trouble with the testing equipment occurs, there is a backup sample for testing. This also allows a provision for a recheck on results if there is an inconsistency or if confirmation of results becomes necessary.

4.2 SPLIT SAMPLE TESTING

Split samples were collected and analyzed on four of the twelve monitoring wells. Monitoring wells MW-4, MW-4A, MW-10, and MW-11 were analyzed by both laboratories. Table 13 presents the comparison of the split samples. The comparison indicates that the results of both laboratories agree favorably.

4.3 CROSS-CONTAMINATION TESTING

Quality control (QC) samples were collected to verify that cross-contamination between wells was not occurring during sampling. Samples were collected prior to sampling the first well and again between selected subsequent wells by the protocol described in Appendix A. The sequence of sampling and the compounds detected in the quality control samples are presented in Table 14. The compounds with elevated levels in the monitoring wells (ethyl benzene, Trichloroethylene, 1,1-Dichloroethane, etc.) were non-

detected at 0.5 ug/l in the quality control samples. This indicates that the monitoring well samples were not contaminated by the sampling system. The low levels of chloroform and methylene chloride detected in the quality control samples are probably related to laboratory contamination since both compounds are known laboratory contaminates.

4.4 SPIKED SAMPLE TESTING

Chemical Research Laboratories, Inc. of Garden Grove, California supplied a set of spiked samples. Samples were spiked with toluene at 194 ug/l, trichloroethylene at 74 ug/l, and ethyl benzene at 151 ug/l. Table 15 presents the percent recovery by each laboratory for these compounds. Percent recovery from the calculated concentration ranged from 59 to 113 percent which indicates an acceptable degree of accuracy.

4.5 SAMPLE CONTROL

All samples were labeled during sampling and shipped refrigerated to the laboratories. A chain-of-custody form was maintained for all samples taken. Copies of these forms are included in Appendix C.

5 GROUNDWATER LEVELS

Depth to groundwater was measured prior to sampling of each monitoring well. The October 1987 measurements and all prior measurements are presented in Table 16. The groundwater surface for October 1987, declined in elevation beneath tne facility from the previous quarter. Water level decline ranged from 1.45 feet to 5.27 feet with an average of approximately 4 feet.

6 GROUNDWATER QUALITY

Hexavalent chromium exists at elevated levels in monitoring wells MW-4 and MW-9. Chromium concentrations were originally detected in MW-4 at 500 mg/l in February 1985. Subsequent concentrations have fluctuated between 61 mg/l and 550 mg/l. Currently Hexavalent chromium exist at 190 mg/l in MW-4.

Elevated levels of Hexavalent chromium also exist in MW-9. Hexavalent chromium was first detected in MW-9 at 0.12 mg/l in June 1987 and has increased to 0.84 mg/l currently.

Cadmium, was originally detected in monitoring well MW-4 at a concentration of 0.78 mg/l in February 1985. Concentrations then decreased to below the Drinking Water Standard of 0.01 mg/l. Currently analysis indicates that cadmium concentrations have increased to 0.33 mg/l. Monitoring well MW-4 is the only well onsite with detectable levels of cadmium.

The EPA 40 CFR groundwater quality indicator parameters TOC, TOX, pH and specific conductance, have remained relatively consistent with previous levels. The exception is specific conductance in Monitoring wells MW-2, MW-3 and MW-8. In MW-2 and MW-8 conductance decreased from 3400 umhos/cm to 1600 umhos/cm and 2100 umhos/cm to 1300 umhos/cm respectively. Chloride concentrations also decreased in these two wells. In MW-3 conductance rose from 2200 umhos/cm to 3300 umhos/cm. There was a corresponding increase in the chloride concentration in this well.

Organic chemicals have not been used onsite by the Southern California Chemical Company, Inc. during production processes. However, a number of organic compounds exist in the groundwater beneath the site. Organics have been detected in wells MW-3, MW-4, MW-10, and MW-11. Monitoring Wells MW-3 and MW-11 are upgradient wells located along the northern property boundary of the site. Monitoring wells MW-10 and MW-4 are located adjacent to Pond 1, down gradient from MW-11. As discussed in previous reports, since organic compounds have not been used onsite, the suspected source for the organics is a neighboring facility.

7 LIMITATIONS

This report is based on:

1. The observations of our field personnel
2. The results of laboratory tests performed by Brown & Caldwell Laboratory and Analytical Technologies, Inc.
3. Measurements of groundwater elevations in the 12 monitoring wells
4. Referenced documents

It is possible that variations in the soil or groundwater conditions could exist beyond the points explored in this investigation. Also, changes in the groundwater conditions could occur at some time in the future due to variations in rainfall, temperature, regional water usage, or other factors. The services performed by **KLEINFELDER** have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the Los Angeles County area. No other warranty, expressed or implied, is made.

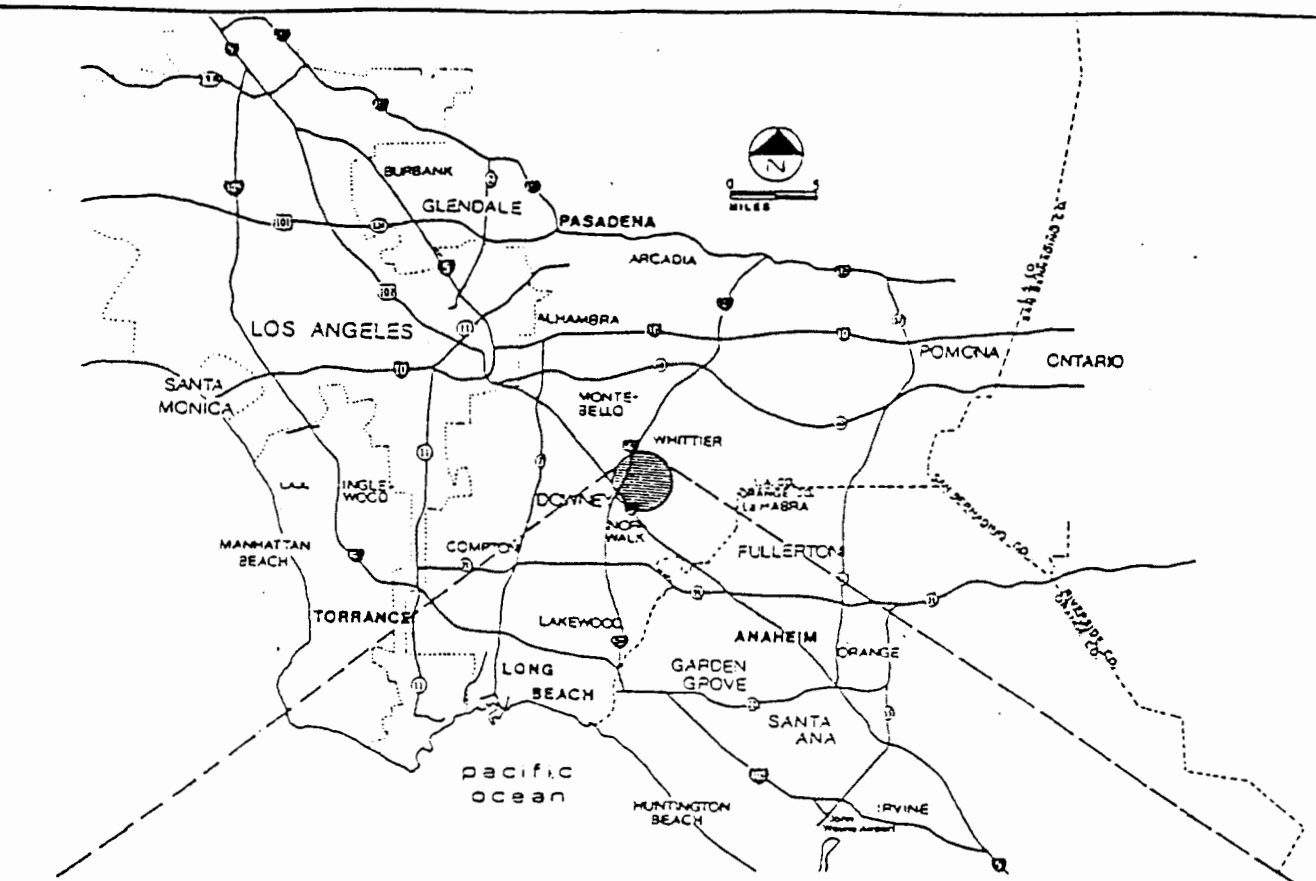
Respectfully submitted,

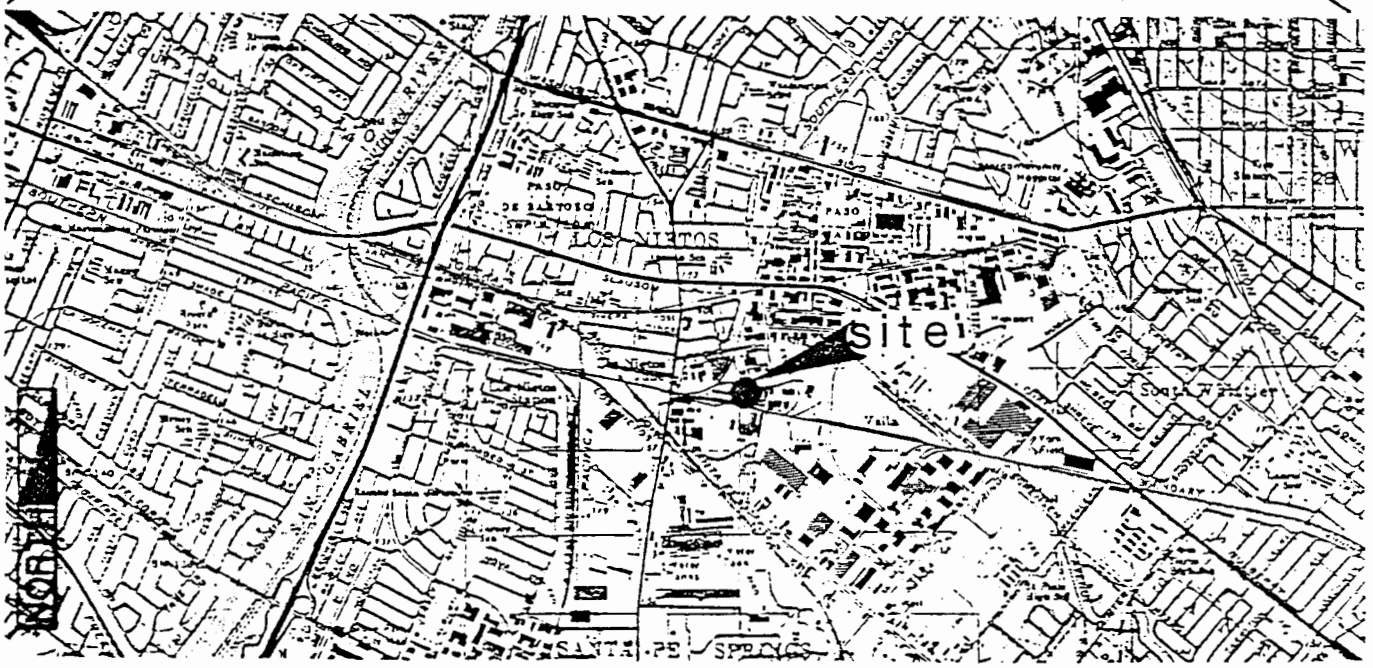
KLEINFELDER

Kenneth L. Durand
Staff Hydrogeologist

Brian Villalobos, R.G. #4153
Senior Hydrogeologist

KLD:BV:cmg





REDUCED FROM USGS 7.5' WHITTIER QUADRANGLE

Drawn By: _____ Date: _____ Checked by: _____ Date _____

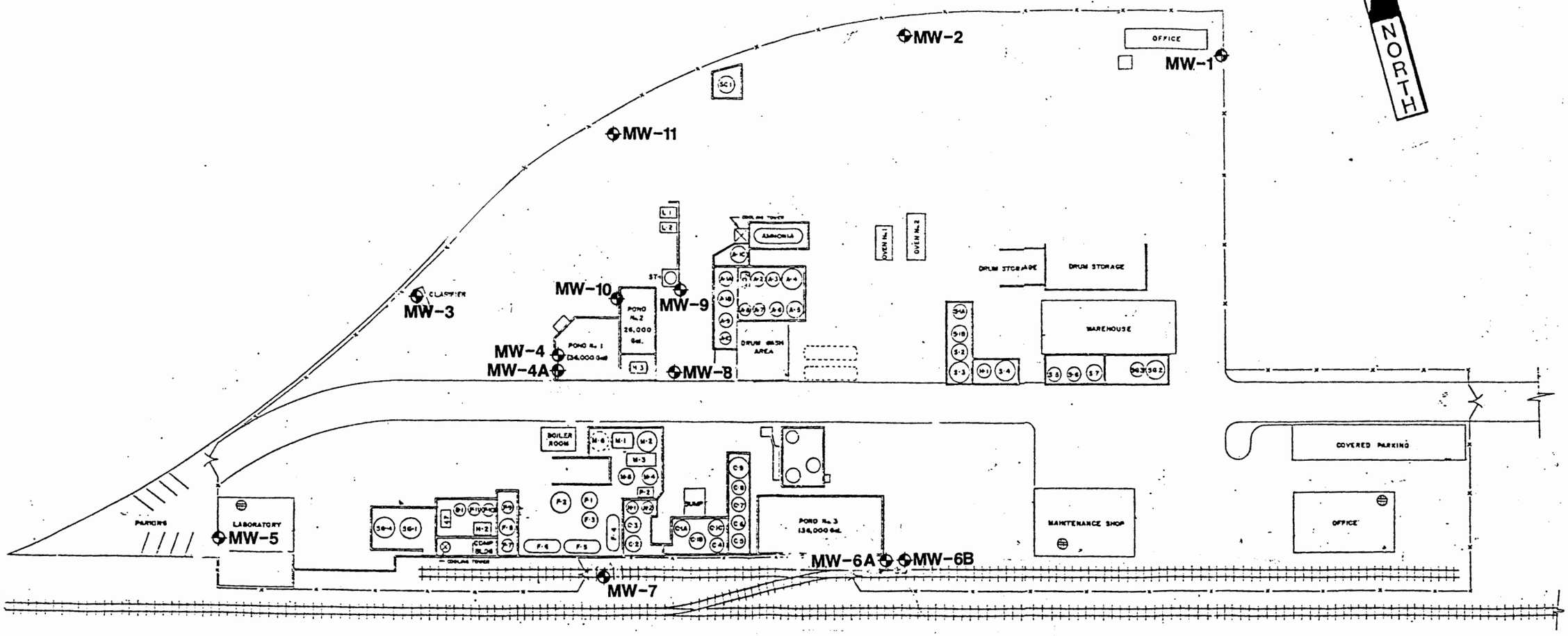
KLEINFELDER

Project Number 50-1014-03 September 1987

SOUTHERN CALIFORNIA CHEMICAL
Santa Fe Springs, California

SITE LOCATION MAP

PLATE 1



SOUTHERN CALIFORNIA CHEMICAL COMPANY
Santa Fe Springs, California

MONITORING WELL LOCATION MAP

PLATE **2**

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL & GROUNDWATER CONSULTANTS

Project Number 50-1014-2

TABLE 1

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #1

COMPOUND	DATE SAMPLED 1/85 - 3/85	7/85 - 8/85	3/86	6/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87
E.P.A. Indicator Parameters (CFR 40 258.22)										
pH (units)	7.2	7.1	7.1	7.0	7.08	6.8	7.0	6.9		
TOC (mg/l)	3.7	19	38	21	ND 3	ND 3	13	32		
TOX (mg/l)	ND .05	ND .02	ND .03	ND .03	ND .08	ND .08	ND .08	ND .08		
SP. COND. (umhos/cm)	1200	3400	1650	3500	3290	2900	3400	3500		
Site Specific Indicator Parameters										
CHROMIUM (TOTAL) (ug/l)	ND .0005	ND .03	ND .02	ND .02	ND .03	ND .04	ND .04	ND .04		
CHROMIUM (HEX) (mg/l)	ND .05	ND .02	ND .02	ND .02	ND .02	ND .02	ND .02	ND .02		
CADMIUM (mg/l)	ND .0002	ND .004	ND .02	ND .01	ND .01	ND .01	ND .01	ND .02		
COPPER (mg/l)	ND .08	ND .02	ND .01	ND .04	ND .04	ND .02	0.10	ND .01		
ZINC (mg/l)	ND .019	0.16	0.04	ND .02	0.016	ND .02	0.06	ND .02		
CHLORIDE (mg/l)	320	300	650	920	700	670	720	77.		
NITRATE as N (mg/l)	7.0	3.7	0.5	1.3	4.06	6.3	ND .1	2.5		
NITRATE as NO3 (mg/l)	31	17	19	11	18	11	ND .4	11		

NOTE: ND 1 = Compound was not detected at 1 ug/l.

Organic Compounds (E.P.A. Method 624)								
1,1-DICHLOROETHANE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	
1,1-DICHLOROETHYLENE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	
1,2-DICHLOROETHANE (ug/l)	ND 1	ND 1	2	1	0.5	1	ND .5	
BENZENE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	
CARBON TETRACHLORIDE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	
CHLOROFORM (ug/l)	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	
ETHYL BENZENE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	
TRICHLOROETHYLENE (ug/l)	16	16	19	18	9	11	2.4	
TOLUENE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5	
XYLENE (ug/l)	ND 1	ND 1	ND 1	----	ND .5	ND .5	ND .5	
METHYLENE CHLORIDE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND 1	ND .5	1.7	

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 2

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #2

	DATE SAMPLED									
	2/85 - 3/85	7/85 - 8/85	2/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87
COMPOUND	E.P.A. Indicator Parameters (CFR 40 265.92)									
pH (Units)	7.0		7.4		7.7	7.4	7.58	7.1	7.1	7.12
TOD (mg/l)	24		4.3		ND 2	ND 2	ND 2	ND 2	ND 2	ND 2
TOX (mg/l)	ND .05		ND .03		ND .03	ND .03	ND .18	ND .08	ND .03	ND .02
SP. COND. (umhos/cm)	2200		1900		1900	2100	2250	1970	2400	1600
Site Specific Indicator Parameters										
CHROMIUM (TOTAL) (mg/l)	ND .0005	ND .033	ND .03		ND .03	ND .03	ND .03	ND .04	ND .04	ND .04
CHROMIUM (HEX) (mg/l)	ND .05	ND .033	ND .03		ND .02	ND .02	ND .02	ND .02	ND .02	ND .02
CADMIUM (mg/l)	ND .0002		ND .009		ND .01	ND .03	ND .01	ND .01	ND .01	ND .01
COPPER (mg/l)	ND .08		ND .02		ND .02	ND .04	ND .04	ND .02	ND .02	ND .01
ZINC (mg/l)	ND .019		ND .03		ND .04	ND .08	0.021	ND .021	ND .03	ND .02
CHLORIDE (mg/l)	270		180		220	410	510	250	700	130
NITRATE as N (mg/l)	2.1		5.8		5.4	5.0	6.25	7.2	8.8	7.2
NITRATE as NO3 (mg/l)	9.1		26		24	22	27.7	32	39	32
NOTE: ND 1 = Compound was not detected at 1 ug/l.										
Organic Compounds (E.P.A. Method 624)										
1,1-DICHLOROETHANE (ug/l)	4		7		ND 1	5	9	21	23	2.5
1,1-DICHLOROETHYLENE (ug/l)	3		ND 1		ND 1	7	5	0.9	11	0.94
1,2-DICHLOROETHANE (ug/l)	ND 1		ND 1		3	1	ND 1	ND .5	1.1	ND .5
BENZENE (ug/l)	ND 1		ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5
CARBON TETRACHLORIDE (ug/l)	ND 1		ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5
CHLOROFORM (ug/l)	ND 1		ND 1		ND 1	1	2	1	ND .5	0.73
ETHYL BENZENE (ug/l)	ND 1		ND 1		3	2	ND 1	ND .5	6.2	ND .5
TRICHLOROETHYLENE (ug/l)	21		22		12	33	67	20	93	40
TOLUENE (ug/l)	ND 1		ND 1		3	ND 1	ND 1	ND .5	ND .5	ND .5
XYLENE (ug/l)	ND 1		ND 1		2	ND 1	----	ND .5	ND .5	ND .5
METHYLENE CHLORIDE (ug/l)	ND 1		ND 1		ND 1	ND 1	ND 1	ND 2	ND .5	11

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 3

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #2

	DATE SAMPLED									
	2/85 - 3/85	7/85 - 8/85	2/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87
COMPOUND	E.P.A. Indicator Parameters (CFR 40 265.92)									
pH (Units)	7.4		7.0		7.2	7.2	7.55	6.9	7.0	6.9
TOC (mg/l)	16		170		44	29	21	10.6	21	50
TOX (mg/l)	0.17		ND .08		.18	.17	.21	.12	.15	.27
SP. COND. (umhos/cm)	1700		1500		2200	2200	2400	2300	2200	2300
Site Specific Indicator Parameters										
CHROMIUM (TOTAL) (mg/l)	ND .0005	ND .003	ND .03		ND .03	ND .10	ND .03	ND .04	ND .04	ND .04
CHROMIUM (HEX) (mg/l)	ND .05	ND .003	ND .02		ND .02	ND .02	ND .02	ND .02	ND .02	ND .02
CADMIUM (mg/l)	ND .0002	ND .011	ND .009		ND .01	ND .01	ND .01	ND .01	ND .01	ND .01
COPPER (mg/l)	ND .03		ND .02		ND .02	ND .04	ND .04	ND .02	0.02	ND .02
ZINC (mg/l)	ND .019		0.26		ND .04	ND .08	0.021	ND .021	ND .03	ND .07
CHLORIDE (mg/l)	170		76		400	520	550	420	350	740
NITRATE as N (mg/l)	3.0		ND 1		2.5	4.1	4.81	3.4	3.3	5.2
NITRATE as NO3 (mg/l)	13		ND 4.4		29	18	21.2	15	17	23

NOTE: ND 1 = Compound was not detected at 1 ug/l.

	Organic Compounds (E.P.A. Method 624)								
1,1-DICHLOROETHANE (ug/l)	6	ND 50	8	4	5	5	4	1.6	5.9
1,1-DICHLOROETHYLENE (ug/l)	14	ND 50	11	7	12	17	7.8	7.9	15
1,2-DICHLOROETHANE (ug/l)	ND 1	ND 50	9	6	7	11	18	2.1	ND .5
BENZENE (ug/l)	5	ND 50	3	ND 1	3	2	ND .5	ND .5	ND .5
CARBON TETRACHLORIDE (ug/l)	73	ND 50	78	110	58	67	50	73	97
CHLOROFORM (ug/l)	46	ND 50	36	97	32	45	20	23	ND .5
ETHYL BENZENE (ug/l)	ND 1.	95,000	1100	ND 1	310	4	ND .5	ND .5	290
TRICHLOROETHYLENE (ug/l)	320	ND 50	160	170	200	150	98	70	150
TOLUENE (ug/l)	2	15,000	11	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5
XYLENE (ug/l)	ND 1	20,000	2000	ND 1	10	----	ND .5	ND .5	ND .5
METHYLENE CHLORIDE (ug/l)	ND 1	ND 50	ND 1	ND 1	2	ND 1	ND 1	ND 1	9.6

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 4

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #4

	DATE SAMPLED									
	3/85 - 5/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	5/87 - 7/87	10/87
COMPOUND	E.P.A. Indicator Parameters (CFR 40 265.92)									
pH (units)	6.7		7.1		7.1	6.6	7.4	6.7	6.7	6.7
TOC (mg/l)	76		26		110	79	98	25.5	133	90
TOX (mg/l)	ND .05		.26		.13	2.3	1.40	.82	2.10	1.3
SP. COND. (umhos/cm)	6400		3600		3500	4250	4950	4000	11,000	7700
Site Specific Indicator Parameters										
CHROMIUM (TOTAL) (mg/l)	500	550	61		120	180	170	95	440	190
CHROMIUM (HEX) (mg/l)	500	500			120	180	170	100	430	202
CADMIUM (mg/l)	0.73	0.92	0.035		0.04	0.09	0.07	0.05	ND .01	.07
COPPER (mg/l)	ND .08		ND .02		ND .02	ND .04	ND .03	ND .02	ND .02	ND .02
ZINC (mg/l)	0.05		ND .03		ND .04	ND .08	ND .007	ND .03	ND .03	ND .07
CHLORIDE (mg/l)	2300		1100		770	1300	1400	960	2500	1800
NITRATE as N (mg/l)	16	12	ND 13		0.5	1.3	1.1	ND .1	ND .7	1.2
NITRATE as NO3 (mg/l)	71	55	ND 55		2.4	5.6	5.0	ND .4	ND 3	5.6

NOTE: ND 1 = Compound was not detected at 1 ug/l.

Organic Compounds (E.P.A. Method 624)									
1,1-DICHLOROETHANE (ug/l)	100	100	42	57	61	120	27	110	120
1,1-DICHLOROETHYLENE (ug/l)	100	42	34	41	61	67	20	94	110
1,2-DICHLOROETHANE (ug/l)	ND 50	17	24	61	12	140	74	74	100
BENZENE (ug/l)	ND 50	16	9	ND 1	ND 10	8	ND 5	ND 5	ND .5
CARBON TETRACHLORIDE (ug/l)	ND 50	ND 1	ND 1	ND 1	ND 10	ND 1	ND 5	ND 5	1.3
CHLOROFORM (ug/l)	ND 50	7	7	9	10	12	6.2	30	22
ETHYL BENZENE (ug/l)	3000	36	50	1100	670	220	160	1500	280
TRICHLOROETHYLENE (ug/l)	550	140	170	220	280	250	180	280	190
TOLUENE (ug/l)	8300	130	25	330	260	220	240	2700	580
XYLENE (ug/l)	10,000	100	30	300	300	300	731	2700	570
METHYLENE CHLORIDE (ug/l)	100	12	ND 1	17	ND 10	ND 1	27	140	110

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 5

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #4A

	DATE SAMPLED								
	2/83 - 3/83	7/83 - 8/83	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87
COMPOUND	E.P.A. Indicator Parameters (CFR 40 265.92)									
pH (Units)		6.3	7.6		7.6	7.5	7.7		7.7	7.2
TOC (mg/l)		40	8.2		ND 3	ND 3	ND 3		ND 3	ND 3
TOX (mg/l)		ND .05	ND .08		ND .08	ND .08	ND .08		.14	ND .05
SP. COND. (umhos/cm)		1500	1500		850	1400	1515		1600	1700
Site Specific Indicator Parameters										
CHROMIUM (TOTAL) (mg/l)		ND .02	ND .03		ND .03	ND .03	ND .03		ND .04	ND .04
CHROMIUM (HEX) (mg/l)		ND .5			ND .02	ND .02	ND .02		ND .02	ND .02
CADMIUM (mg/l)		ND .01	ND .01		ND .01	ND .01	ND .01		ND .01	ND .01
COPPER (mg/l)			ND .02		ND .02	ND .04	ND .03		ND .02	ND .02
ZINC (mg/l)			ND .02		ND .04	ND .08	ND .007		ND .02	ND .03
CHLORIDE (mg/l)			100		110	120	130		150	120
NITRATE as N (mg/l)		4.5	7.5		5.1	4.7	6.3		5.4	6.1
NITRATE as NO3 (mg/l)		20	33		27	21	28		24	27

NOTE: ND 1 = Compound was not detected at 1 ug/l.

	Organic Compounds (E.P.A. Method 624)						
1,1-DICHLOROETHANE (ug/l)	13	11	3	19	140	1.2	
1,1-DICHLOROETHYLENE (ug/l)	1	1	ND 1	2	50	ND .5	
1,2-DICHLOROETHANE (ug/l)	ND 1	ND 1	ND 1	2	1.5	ND .5	
BENZENE (ug/l)	8	ND 1	ND 1	ND 1	ND .5	ND .5	
CARBON TETRACHLORIDE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	
CHLOROFORM (ug/l)	ND 1	ND 1	ND 1	2	17	ND .5	
ETHYL BENZENE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	
TRICHLOROETHYLENE (ug/l)	9	7	3	12	82	3.3	
TOLUENE (ug/l)	ND 1	ND 1	ND 1	ND 1	1.5	ND .5	
XYLENE (ug/l)	ND 1	ND 1	ND 1	----	ND .5	ND .5	
METHYLENE CHLORIDE (ug/l)	ND 1	ND 1	ND 1	ND 1	11	ND .5	

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 6

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #5

	DATE SAMPLED								
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87
COMPOUND	E.P.A. Indicator Parameters (CFR 40 265.92)									
pH (Units)	7.7	7.4	7.3	7.3	7.82	6.9	7.0	7.0		
TOC (mg/l)	ND 3	4.8	5	7	ND 3	ND 3	ND 3	5		
TOX (mg/l)	.19	.16	.65	.19	.30	.45	.06	ND .08		
SP. COND. (uanos/cm)	1700	1200	1400	1100	1220	1400	1400	1300		
Site Specific Indicator Parameters										
CHROMIUM (TOTAL) (mg/l)	ND .0005	ND .03	ND .03	ND .03	ND .03	ND .04	ND .04	ND .04		
CHROMIUM (HEX) (mg/l)	ND .05	ND .02	ND .02	ND .02	ND .02	ND .02	ND .02	ND .02		
CADMIUM (mg/l)	ND .0002	ND .009	ND .01	ND .01	ND .01	ND .01	ND .01	ND .02		
COPPER (mg/l)	ND .08	ND .02	ND .02	ND .04	ND .04	ND .02	ND .02	ND .02		
ZINC (mg/l)	ND .019	0.18	ND .04	ND .08	ND .301	ND .031	ND .03	ND .03		
CHLORIDE (mg/l)	2.0	66	79	290	142.5	110	110	100		
NITRATE as N (mg/l)	0.42	8.8	12	8.5	11.13	10	15	5.4		
NITRATE as NO3 (mg/l)	1.9	39	55	38	49.3	45	65	24		
NOTE: ND 1 = Compound was not detected at 1 ug/l.										
Organic Compounds (E.P.A. Method 624)										
1,1-DICHLOROETHANE (ug/l)	ND 1	ND 1	2	2	7	4	5.4	0.89		
1,1-DICHLOROETHYLENE (ug/l)	ND 1	ND 1	3	3	4	2.7	5.2	0.85		
1,2-DICHLOROETHANE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5		
BENZENE (ug/l)	5	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5		
CARBON TETRACHLORIDE (ug/l)	3	11	45.5	37	68	100	120	99		
CHLOROFORM (ug/l)	.2	10	14.5	16	43	46	50	35		
ETHYL BENZENE (ug/l)	ND 1	ND 1	ND 1	6	ND 1	ND .5	ND .5	ND .5		
TRICHLOROETHYLENE (ug/l)	10	24	64	76	70	70	59	26		
TOLUENE (ug/l)	1	ND 1	ND 1	ND 1	ND 1	ND .5	ND .5	ND .5		
XYLENE (ug/l)	ND 1	ND 1	ND 1	ND 1	----	ND .5	7.3	ND .5		
METHYLENE CHLORIDE (ug/l)	ND 1	ND 1	ND 1	ND 1	ND 1	ND 2	ND .5	4.3		

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 7

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #5B

	DATE SAMPLED								
	2/85 - 3/85	7/85 - 8/85	5/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87
COMPOUND	E.P.A. Indicator Parameters (CFR 40 265.92)									
pH (Units)	7.6	7.4		7.6	7.8	7.6	7.1	7.4	7.1
TOC (mg/l)	ND 3	6.5		ND 3	ND 3	ND 3	ND 3	ND 3	9
TOX (mg/l)	0.1	ND .08		ND .08	ND .08	ND .08	ND .08	ND .08	ND .08	ND .08
SP. COND. (umhos/cm)	1400	1300		1400	1200	1425	1400	1600	1410
	Site Specific Indicator Parameters									
CHROMIUM (TOTAL) (mg/l)	0.0038	ND .03		ND .03	ND .02	ND .03	ND .04	ND .04	ND .04
CHROMIUM (HEX) (mg/l)	ND .05	ND .02		ND .02	ND .02	ND .02	ND .02	ND .02	ND .02	ND .02
CADMIUM (mg/l)	ND .0002	ND .009		ND .01	ND .01	ND .01	ND .01	ND .01	ND .01	ND .01
COPPER (mg/l)	ND .08	ND .02		ND .02	ND .04	ND .03	ND .02	ND .02	ND .02	ND .02
ZINC (mg/l)	ND .03	ND .03		ND .04	ND .03	ND .007	ND .03	ND .03	ND .03	ND .03
CHLORIDE (mg/l)	79	220		82	100	140	82	130	94
NITRATE as N (mg/l)	6.9	8.3		7.0	5.2	6.1	7	8.4	8.4
NITRATE as NO3 (mg/l)	28	39		31	23	27	31	37	37
NOTE: ND 1 = Compound was not detected at 1 ug/l.										
	Organic Compounds (E.P.A. Method 624)									
1,1-DICHLOROETHANE (ug/l)		ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5
1,1-DICHLOROETHYLENE (ug/l)		ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5
1,2-DICHLOROETHANE (ug/l)		ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5
BENZENE (ug/l)		ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5
CARBON TETRACHLORIDE (ug/l)		ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5
CHLOROFORM (ug/l)		ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5
ETHYL BENZENE (ug/l)		ND 1		ND 1	ND 1	ND 1	ND .5	1.5	ND .5
TRICHLOROETHYLENE (ug/l)		30		19	23.5	24	21	20	22
TOLUENE (ug/l)		ND 1		ND 1	ND 1	ND 1	ND .5	0.3	ND .5
XYLENE (ug/l)		ND 1		ND 1	ND 1	----	ND .5	7.9	ND .5
METHYLENE CHLORIDE (ug/l)		ND 1		ND 1	ND 1	ND 1	ND .5	2.6	1.2
NOTE: ND 1 = Compound was not detected at 1 ug/l.										

TABLE 8

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #7

COMPOUND	DATE SAMPLED: 1/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	5/87 - 7/87	10/87
E.P.A. Indicator Parameters (CFR 40 258.92)										
pH (units)	6.3	7.3		7.4	7.2	7.3	6.5	6.8	7.1	
TOC (mg/l)	260	6.5		5	17	ND 3	43	7	5	
TOX (mg/l)	0.061	ND .09		ND .08	ND .08	ND .08	ND .08	.11	ND .08	
SP. COND. (umhos/cm)	2700	1700		1900	5600	5850	3700	3300	5000	
Site Specific Indicator Parameters										
CHROMIUM (TOTAL) (mg/l)	ND .03	ND .03		ND .03	ND .03	ND .03	ND .04	ND .04	ND .04	
CHROMIUM (HEX) (mg/l)	ND .5	ND .02		ND .02	ND .02	ND .02	ND .02	ND .02	ND .02	
CADMIUM (mg/l)	ND .01	ND .009		ND .01	ND .01	ND .01	ND .01	ND .01	ND .01	
COPPER (mg/l)		ND .02		ND .02	ND .04	ND .03	ND .02	0.03	ND .02	
ZINC (mg/l)		ND .03		ND .04	ND .04	0.322	ND .03	0.04	ND .03	
CHLORIDE (mg/l)	380	190		280	1800	1700	630	810	1130	
NITRATE as N (mg/l)	27	5.0		4.3	2.7	4.4	19	25	4.1	
NITRATE as NO3 (mg/l)	120	22		19	12	19.5	82	110	18	
NOTE: ND 1 = Compound was not detected at 1 ug/l.										
Organic Compounds (E.P.A. Method 624)										
1,1-DICHLOROETHANE (ug/l)	2			8	42	30	7.1	14	6	
1,1-DICHLOROETHYLENE (ug/l)	ND 1			2	5	6	ND 5	6	.55	
1,2-DICHLOROETHANE (ug/l)	ND 1			ND 1	2	ND 1	ND 5	ND .5	ND .5	
BENZENE (ug/l)	64			ND 1	ND 1	ND 1	ND 5	ND .5	ND .5	
CARBON TETRACHLORIDE (ug/l)	ND 1			ND 1	ND 1	ND 1	ND 5	ND .5	ND .5	
CHLOROFORM (ug/l)	ND 1			ND 1	ND 1	ND 1	9.2	ND .5	ND .5	
ETHYL BENZENE (ug/l)	ND 1			4	ND 1	ND 1	1.0	ND .5	ND .5	
TRICHLOROETHYLENE (ug/l)	29			67	71	70	180	130	36	
TOLUENE (ug/l)	2			5	ND 1	ND 1	2.2	0.6	ND .5	
XYLENE (ug/l)	ND 1			4	ND 1	----	ND 5	ND .5	ND .5	
METHYLENE CHLORIDE (ug/l)	ND 1			ND 1	ND 1	ND 1	ND 5	ND .5	1.1	

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 9

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #8

	DATE SAMPLED								
	2/85 - 3/85	7/85 - 8/85	2/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87
COMPOUND	E.P.A. Indicator Parameters (CFR 40 §65.92)									
ph (Units)	6.6	7.5			7.4	7.4	7.4	6.9	7.1	7.1
TOC (mg/l)	99	7			6	ND 3	ND 3	ND 3	5	ND 3
TOX (mg/l)	0.44	.09			ND .08	.10	.15	ND .08	.13	ND .03
SP. COND. (umhos/cm)	2300	1500			1700	1600	1800	2000	2100	1500
Site Specific Indicator Parameters										
CHROMIUM (TOTAL) (mg/l)	ND .05	ND .03			ND .02	ND .03	ND .03	ND .04	ND .04	ND .04
CHROMIUM (HEX) (mg/l)	ND .05	ND .02			ND .02	ND .02	ND .02	ND .02	ND .02	ND .02
CADMIUM (mg/l)	ND .01	ND .009			ND .01	ND .01	ND .01	ND .01	ND .01	ND .02
COPPER (mg/l)		ND .02			ND .02	ND .04	ND .03	ND .02	ND .02	ND .02
ZINC (mg/l)		ND .03			ND .04	ND .05	ND .001	ND .05	ND .03	ND .02
CHLORIDE (mg/l)		530			170	270	250	300	300	120
NITRATE as N (mg/l)	1.3	4.2			3.2	2.7	3.2	2.5	2.2	4.3
NITRATE as NO3 (mg/l)	5.8	39			14	12	14.1	11	10	19

NOTE: ND 1 = Compound was not detected at 1 ug/l.

Organic Compounds (E.P.A. Method 624)										
1,1-DICHLOROETHANE (ug/l)			41		76	160	160	55	160	45
1,1-DICHLOROETHYLENE (ug/l)			3		8	17	19	5.6	29	5.5
1,2-DICHLOROETHANE (ug/l)			1		14	14	8	9.5	16	ND .5
BENZENE (ug/l)			ND 1		ND 1	ND 1	ND 1	ND .5	ND .5	ND .5
CARBON TETRACHLORIDE (ug/l)			ND 1		ND 1	ND 1	8	ND .5	ND .5	ND .5
CHLOROFORM (ug/l)			ND 1		2	2	2	5.6	ND .5	0.55
ETHYL BENZENE (ug/l)			ND 1		2	ND 1	ND 1	ND .5	ND .5	ND .5
TRICHLOROETHYLENE (ug/l)			19		28	52	44	67	51	25
TOLUENE (ug/l)			ND 1		2	ND 1	ND 1	2.3	ND .5	ND .5
XYLENE (ug/l)			ND 1		1	ND 1	----	ND .5	ND .5	ND .5
METHYLENE CHLORIDE (ug/l)			5		ND 1	ND 1	ND 1	ND .5	2.4	3.6

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 10

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #9

	DATE SAMPLED								
	2/85 - 5/85	7/85 - 9/85	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87
COMPOUND	E.P.A. Indicator Parameters (CFR 40 265.92)									
pH (Units)	6.4	7.4		7.3	7.1	7.4	6.9	6.8	6.7	
TOC (mg/l)	210	14		29	2.3	24	ND 5	42	15	
TOX (mg/l)	0.10	.26		.12	.28	.37	.37	.48	.28	
SP. COND. (umhos/cm)	2200	2900		2000	2400	2675	2500	2230	2100	
Site Specific Indicator Parameters										
CHROMIUM (TOTAL) (mg/l)	ND .02	ND .02		ND .03	ND .03	ND .03	ND .04	0.12	.84	
CHROMIUM (HEX) (mg/l)	ND .5	ND .02		ND .02	0.05	ND .02	ND .02	0.05	.59	
CADMIUM (mg/l)	ND .01	ND .00		ND .01	ND 1	ND .01	ND .01	ND .0.	ND .1	
COPPER (mg/l)		ND .02		ND .02	ND .04	ND .03	ND .02	ND .02	ND .02	
ZINC (mg/l)		ND .03		ND .04	ND .05	0.018	ND .02	ND .02	ND .10	
CHLORIDE (mg/l)	500	530		250	720	670	470	640	630	
NITRATE as N (mg/l)	1.4	8.8		3.2	1.4	3.72	4.1	2.7	8.4	
NITRATE as NO3 (mg/l)	6.3	39		14	6.2	16.5	18	12	37	

NOTE: ND 1 = Compound was not detected at 1 ug/l.

	Organic Compounds (E.P.A. Method 624)						
1,1-DICHLOROETHANE (ug/l)	99	50	360	250	110	140	130
1,1-DICHLOROETHYLENE (ug/l)	16	16	230	110	44	72	64
1,2-DICHLOROETHANE (ug/l)	10	12	90	52	90	89	ND .5
BENZENE (ug/l)	ND 1	ND 1	ND 5	ND 1	ND .5	ND 2.5	ND .5
CARBON TETRACHLORIDE (ug/l)	ND 1	ND 1	ND 5	ND 1	ND .5	ND 2.5	ND .5
CHLOROFORM (ug/l)	20	4	30	22	10	19	27
ETHYL BENZENE (ug/l)	ND 1	ND 1	ND 5	ND 1	ND .5	ND 2.5	ND .5
TRICHLOROETHYLENE (ug/l)	61	3	550	240	150	160	150
TOLUENE (ug/l)	ND 1	ND 1	ND 5	ND 1	0.7	ND 2.5	ND .5
XYLENE (ug/l)	ND 1	ND 1	ND 5	----	ND .5	ND 2.5	ND .5
METHYLENE CHLORIDE (ug/l)	110	ND 1	ND 5	18	29	33	33

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 11

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #10

	DATE SAMPLED									
	2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	5/87 - 7/87	10/87
COMPOUND	E.P.A. Indicator Parameters (CFR 40 265.92)									
pH (Units)		6.8	7.9		7.6	7.4	7.8	7.4	7.2	7.1
TOC (mg/l)		440	10		120	103	135	33.3	158	56
TOX (mg/l)		0.17	ND .08		ND .08	.14	.15	.20	.82	.13
SP. COND. (umhos/cm)		2100	1300		1600	1400	1550	1600	2100	1900
	Site Specific Indicator Parameters									
CHROMIUM (TOTAL) (mg/l)		ND .03	ND .03		ND .03	ND .03	ND .03	ND .04	ND .04	ND .04
CHROMIUM (HEX) (mg/l)		ND .5			ND .02	ND .02	ND .02	ND .02	ND .02	ND .02
CADMIUM (mg/l)		ND .01			ND .01	ND .01	ND .01	ND .01	ND .01	ND .01
COPPER (mg/l)			ND .02		ND .02	ND .04	ND .03	ND .02	ND .02	ND .02
ZINC (mg/l)			ND .03		ND .04	ND .06	ND .007	ND .03	ND .03	ND .03
CHLORIDE (mg/l)			150		120	150	160	160	260	220
NITRATE as N (mg/l)		ND .1	ND .1		0.1	ND .01	ND .1	ND .1	ND .1	ND .1
NITRATE as NO3 (mg/l)		ND 4.4	ND 4.4		0.6	ND .04	ND .4	ND .4	ND .4	ND .4
NOTE: ND 1 = Coscound was not detected at 1 ug/l.										
	Organic Compounds (E.P.A. Method 624)									
1,1-DICHLORDETHANE (ug/l)		ND 50	2		6	ND 10	20	ND 5	23	21
1,1-DICHLORDETHYLENE (ug/l)		ND 50	1		7	14	ND 20	ND 5	41	28
1,2-DICHLORDETHANE (ug/l)		ND 50	17		86	200	270	65	160	93
BENZENE (ug/l)		ND 50	ND 1		ND 1	ND 10	ND 20	ND 5	ND 2.5	ND .5
CARBON TETRACHLORIDE (ug/l)		ND 50	ND 1		ND 1	ND 10	ND 20	ND 5	ND 2.5	ND .5
CHLOROFORM (ug/l)		50	ND 1		ND 1	ND 10	ND 20	ND 5	3.1	2.3
ETHYL BENZENE (ug/l)		6500	68		ND 1	2200	1800	330	2000	360
TRICHLORDETHYLENE (ug/l)		250	29		56	93	120	62	160	130
TOLUENE (ug/l)		17,000	ND 1		ND 1	26	560	ND 5	14	ND .5
XYLENE (ug/l)		20,000	ND 1		70	90	600	120	500	ND .5
METHYLENE CHLORIDE (ug/l)		100	ND 1		ND 1	ND 10	ND 20	ND 5	12	1.3

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 12

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

WATER QUALITY DATA

MONITORING WELL #11

COMPOUND	DATE SAMPLED: 2/85 - 3/85	7/85 - 8/85	3/86	5/86	7/86	9/86	12/86	3/87	6/87 - 7/87	10/87
E.P.A. Indicator Parameters (CFR 40 265.92)										
PH (units)	6.6	7.8		7.2	7.3	7.5	7.8	7.4	7.4
TOC (mg/l)	54	13		120	151	125	26.3	58	61
TOX (mg/l)	ND .05	0.1		ND .08	ND .08	.12	.14	.15	ND .08
SP. COND. (umhos/cm)	1600	1500		1700	1800	1800	1700	2100	1600
Site Specific Indicator Parameters										
CHROMIUM (TOTAL) (mg/l)	ND .03	ND .03		ND .03	ND .03	ND .03	ND .04	ND .04	ND .04
CHROMIUM (HEX) (mg/l)	ND .5			ND .02	ND .02	ND .02	ND .02	ND .02	ND .02
CADMIUM (mg/l)	ND .01	ND .01		ND .01	ND .01	ND .01	ND .01	ND .01	ND .02
COPPER (mg/l)		ND .02		ND .02	ND .04	ND .03	ND .02	ND .02	ND .02
ZINC (mg/l)		ND .03		ND .04	ND .08	ND .001	ND .03	ND .03	ND .03
CHLORIDE (mg/l)	22)	230		180	230	240	170	270	110
NITRATE as N (mg/l)	1.2	2.5		1.1	ND 1	0.1	1.2	0.7	1.5
NITRATE as NO3 (mg/l)	5.2	11		4.8	ND .4	0.5	5.5	3.3	6.8

NOTE: ND 1 = Compound was not detected at 1 ug/l.

Organic Compounds (E.P.A. Method 624)								
1,1-DICHLOROETHANE (ug/l)	10	4	10	ND 200	ND 100	6.9	12	2.3
1,1-DICHLOROETHYLENE (ug/l)	8	2	5	ND 200	ND 100	5.0	11	2.6
1,2-DICHLOROETHANE (ug/l)	8	31	17	ND 200	130	95	21	89
BENZENE (ug/l)	ND 1	3	ND 1	ND 200	ND 100	1.5	ND .5	ND .5
CARBON TETRACHLORIDE (ug/l)	ND 1	ND 1	ND 1	ND 200	ND 100	ND .5	ND .5	ND .5
CHLOROFORM (ug/l)	3	3	10	ND 200	ND 100	3.3	3.5	1.0
ETHYL BENZENE (ug/l)	13	1800	2200	6400	3300	ND .5	1200	180
TRICHLOROETHYLENE (ug/l)	110	35	76	ND 200	180	46	81	36
TOLUENE (ug/l)	ND 1	5400	5200	14,000	7500	3.5	360	ND .5
XYLENE (ug/l)	20	4000	1500	10,000	3000	220	370	ND .5
METHYLENE CHLORIDE (ug/l)	ND 1	ND 1	ND 1	ND 200	ND 100	1.8	9.4	ND .5

NOTE: ND 1 = Compound was not detected at 1 ug/l.

TABLE 13

CHEMICAL ANALYSIS OF SPLIT SAMPLES

	MW 4A		MW 4		MW 10		MW 11	
	A.T.I.	B & C	A.T.I.	B & C	A.T.I.	B & C	A.T.I.	B & C
COMPOUND								
1,1-DICHLORDETHANE (ug/l)	0.42	1.2	150	120	19	21	3.7	2.3
1,1-DICHLORDETHYLENE (ug/l)	ND .2	ND .5	80	110	21	28	ND 2	2.6
1,2-DICHLORDETHANE (ug/l)	ND .2	ND .5	84	100	94	93	75	89
BENZENE (ug/l)	ND .5	ND .5	ND 50	ND .5	ND 5	ND .5	ND 5	ND .5
CARBON TETRACHLORIDE (ug/l)	ND .2	ND .5	ND 20	1.5	ND 2	ND .5	ND 2	ND .5
CHLOROFORM (ug/l)	ND .2	ND .5	ND 20	23	ND 2	2.3	ND 2	1.0
ETHYL BENZENE (ug/l)	ND .5	ND .5	440	380	300	360	150	180
TRICHLORDETHYLENE (ug/l)	1.1	3.2	350	190	110	130	19	36
TOLUENE (ug/l)	ND .5	ND .5	970	580	ND 5	ND .5	ND 5	ND .5
XYLENE (ug/l)	ND .5	ND .5	1460	570	ND 5	ND .5	ND 5	ND .5
METHYLENE CHLORIDE (ug/l)	ND 2	ND .5	ND 200	110	ND 20	1.8	ND 20	ND .5

NOTE: ND 1 = Compound was not detected at 1 ug/l.

B & C = Brown & Caldwell Laboratories

A.T.I. = Analytical Technologies, Inc.

TABLE 14

SEQUENCE OF SAMPLING

	PARAMETERS						
MONITORING WELL NO.	1,1-DICHLORDETHANE	1,1-DICHLORDETHYLENE	ETHYL BENZENE	TRICHLORDETHYLENE	TOLUENE	CHLOROFORM	METHYLENE CHLORIDE
QC 1615	ND .5	ND .5	ND .5	ND .5	ND .5	0.65	17
MW 1	ND .5	ND .5	ND .5	24	ND .5	ND .5	1.7
MW 3	6.9	15	290	150	ND .5	ND .5	9.6
MW 6S	ND .5	ND .5	ND .5	33	ND .5	ND .5	1.2
QC 1671	ND .5	ND .5	ND .5	ND .5	ND .5	0.73	20
MW 7	6.0	0.66	ND .5	36	ND .5	ND .5	1.1
MW 2	2.5	0.94	ND .5	40	ND .5	0.73	11
MW 5	0.69	0.85	ND .5	26	ND .5	85	4.3
QC 1730	ND .5	ND .5	ND .5	ND .5	ND .5	0.76	23
MW 8	45	5.5	ND .5	25	ND .5	0.65	3.6
MW 9	130	64	ND .5	150	ND .5	27	63
MW 4R	1.2	ND .5	ND .5	3.2	ND .5	ND .5	ND .5
QC 1788	ND .5	ND .5	ND .5	ND .5	ND .5	ND .5	5.3
MW 11	2.3	2.6	180	36	ND .5	1.9	ND .5
MW 10	21	28	360	130	ND .5	2.5	1.8
MW 4	120	110	330	190	580	23	110

NOTE: Concentrations are in ug/l (ppb).
ND .5 = Compound was not detected at 1 ug/l.

TABLE 15

CHEMICAL ANALYSIS OF SPIKED SAMPLES

	C.R.L.		B & C		A.T.I.	
COMPOUND	Calculated Concentration	Analyzed Concentration	Analyzed Concentration	% Difference from Calculated	Analyzed Concentration	% Difference from Calculated
TOLUENE (ug/l)	194	190	220	113%	140	72%
ETHYL BENZENE (ug/l)	151	136	160	106%	110	73%
TRICHLOROETHYLENE (ug/l)	74	73	87	117%	44	59%

NOTE: A.T.I. = Analytical Technologies, Inc.

B & C = Brown & Caldwell Laboratories

C.R.L. = Chemical Research Laboratories

TABLE 16

GROUNDWATER LEVEL ELEVATIONS

(feet MSL)

Well Number	Well Head Elevation (feet MSL)	(feet Below Ground Surface) Well Depth	Perforated Interval	2-12-85 to 3-12-85	4-09-85	7-24-85 to 8-05-85	9-19-85	9-20-85	3-19-86	7-09-86	9-24-86	12-17-86	3-31-87	7/1/87	10/17/87
1	153.62	62.5	42.5-62.5	108.49	108.48	109.66	108.16	106.05	103.40	107.78	105.15	103.65	103.71	103.57	100.09
2	151.56	74.0	44-74	107.31	107.72	109.21	107.56	105.49	102.44	107.04	104.05	102.96	106.58	103.55	98.85
3	151.62	75.0	45-75	106.37	107.52	108.37	106.65	104.46	101.22	106.03	103.15	102.07	102.96	101.87	97.77
4	149.76	75.0	45-75	105.76	108.11	108.36	105.15	104.50	101.42	105.94	102.98	101.81	101.78	102.95	97.76
4A	152.49	107.0	87-107			108.84	109.43	104.49	102.67	107.29	104.29	102.09		104.19	98.92
5	153.21	75.0	45-75	105.71	106.02	107.68	106.03	103.84	100.46	105.40	102.49	101.41	101.37	98.51	96.24
6A	149.31	30.0	10-30		119.39		120.91								
6B	149.46	77.0	47-77	106.46	106.80		107.81	104.92	101.48	106.02	103.21	102.16	101.95	103.11	98.28
7	149.27	75.0	45-75			107.48	105.34	104.33	101.07	105.73	102.63	101.57	101.52	99.20	97.75
8	149.53	71.0	41-71			107.95	106.86	104.78	101.65	106.26	103.17	101.98	101.68	101.52	98.12
9	151.14	77.0	47-77			108.35	106.98	104.25	102.14	106.72	103.64	102.74	104.02	103.53	98.56
10	151.60	75.0	45-75			107.88	106.94	104.87	102.90	106.26	103.15	102.40	102.82	102.14	98.01
11	152.30	75.5	55-75			108.38	107.17	105.03	101.96	106.81	103.34	102.65	102.91	102.41	98.21

NOTE: MSL = Elevations in feet above mean sea level.

APPENDIX A

APPENDIX

MONITORING WELL SAMPLING PROTOCOL

II. Groundwater Sampling

A. Decontamination

The following procedure details the routine that is employed in decontamination of groundwater sampling equipment prior to sample collection:

1. Exterior surface of sampling tubes are decontaminated by steam-cleaning during withdrawal from every well.

2. Sample pump is disassembled and the used bladder removed.

3. All pump components are then steam-cleaned and rinsed in distilled water.

4. Pump is re-assembled with a new bladder installed.

5. Teflon sampler lines are pressure washed with 5 to 10 gallons of clean, hot water through direct connection to steam-cleaner.

6. Five gallons of distilled water are then pumped through entire system.

7. Prior to sample collection, a minimum of five well volumes are purged from the well to permit collection of a representative groundwater sample from the aquifer penetrated.

B. Purge Volume Determination

The following procedure is followed to determine the appropriate purging volume prior to well sampling.

1. The depth-to-water is measured by a clean, electric water level indicator. Measurement datum is the top of fill ring or top of well protector.

2. Depth to the bottom of the well is measured by a clean tape and plumb bob. If possible, this is compared to the well construction log to determine inconsistencies, i.e., damaged casing, sediment in casing, etc.

3. Water volume is calculated by multiplying total water depth by the volume of one foot of of the casing. This figure is one well volume.

C. Well Purging and Sampling

1. Prior to sampling, a minimum of three to five well volumes are purged from each well to ensure that water sampled is representative of the groundwater within the formation.

2. Measurements of pH, conductivity and temperature are taken at frequent intervals during the purge. Stabilization of these values indicates that representative formation fluids are being removed from the well.

3. In the event that the well is pumped dry, an alternate procedure will be followed. Once a well is pumped dry, the water that enters the well during recovery is, by definition, representative formation water. The well will, therefore, be pumped dry and allowed to recover to 80% or more of the original water level.

4. Purge water is pumped directly into barrels on site until the proper method of disposal is determined.

5. Samples pumped directly into sampling bottles prepared by the state certified laboratory contracted for the particular job are labeled and placed in coolers for transport to the laboratory.

6. Samples are delivered directly to the lab on the same day of sampling by courier, whenever practical. If next-day delivery is necessary, the samples are kept refrigerated at 4 degrees Celsius overnight and delivered to the laboratory the following morning.

7. Samples are accompanied by a Chain of Custody form which documents the time, date, and responsible person during each step of the transportation process.

8. The KLEINFELDER coded sample numbering system allows identification of sample and client to KLEINFELDER, while not revealing the client to the laboratory or other interested parties.

Water samples are numbered in the following manner:

W-XX-YY

Where:

W - designates water sample
XX - well number
YY - sequential sample number

For example, W-01-22 indicates a water sample from well number 1. The sample is the 22nd water sample taken at the site.

9. The complete information on the sample label includes:

Date and time
Client job number (never client name)
Sample number
Initials of sampler
Analysis desired (if known)
Preservatives in sample bottle (usually noted by lab)

10. Each sample bottle is given a separate sequential number.

APPENDIX B

BROWN AND CALDWELL LABORATORIES

373 SOUTH FAIR OAKS AVENUE PASADENA, CA 91105 • (818) 795-7553

November 2, 1987

Lab No. P87-10-284
P87-10-341

Mr. Ken Durand
Kleinfelder & Associates
17100 Pioneer Boulevard, Suite 350
Artesia, California 90701

Dear Mr. Durand:

Brown and Caldwell analyzed ten groundwater samples taken October 13-15, 1987, for Project 50-1014-3. A summary of the methods used in the analysis is provided below:

Analyte	Method No.	Reference	Description
Hexavalent Chromium	7196	1	Colorimetric
Nitrate	353.2	2	Automated Cd reduction
Quad. TOC	415.1	2	Combustion
Sulfite	300.0	2	Ion Chromatography
Quad. Conductivity	120.1	2	Specific conductance
Quad. pH	150.1	2	Electrometric
Chloride	325.3	2	Titrimetric mercury nitrate
Sulfate	375.4	2	Turbidimetric
Quad. TOX	506	3	Adsorption-pyrolysis
Cadmium	213.1	2	AA, Direct aspiration
Chromium	218.1	2	AA, Direct aspiration
Copper	220.1	2	AA, Direct aspiration
Zinc	289.1	2	AA, Direct aspiration
Volatile Purgeable Priority Pollutants	624	4	GC/MS for Volatile organics

Reference:

1. SW-846, Test Methods for Evaluating Solid Waste, 3rd Edition, November, 1986.
2. USEPA-600/4-79-020, Method for the Examination of Water and Wastewater, March, 1983.
3. Standard Methods for the Examination of Water and Wastewater, 16th Edition, 1986.
4. 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, Federal Register, October 26, 1984.

Should you have any questions, please do not hesitate to call us.

Very truly yours,

BROWN AND CALDWELL

Jane Freemyer

Jane Freemyer
Section Supervisor

JF:lah

BROWN AND CALDWELL LABORATORIES
373 SOUTH FAIR OAKS AVENUE PASADENA, CA 91105 • (818) 795-7553

ANALYTICAL REPORT

LOG NO: P87-10-284

Received: 13 OCT 87
Reported: 28 OCT 87

Ken Durand
J. H. Kleinfelder & Associates
17100 Pioneer Blvd., Suite 350
Artesia, California 90701

Project: 50-1014-3

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
10-284-1	W-02-(1694-1711)	13 OCT 87
10-284-2	W-05-(1712-1729)	13 OCT 87
10-284-3	W-08-(1732-1749)	13 OCT 87
10-284-4	W-09-(1750-1767)	13 OCT 87
10-284-5	W-00-(1730-1731)	13 OCT 87

PARAMETER	10-284-1	10-284-2	10-284-3	10-284-4	10-284-5
Hexavalent Chromium, mg/L	<0.02	<0.02	<0.02	0.59	---
Nitrate Nitrogen					
Nitrate (as NO3), mg/L	32	24	19	37	---
Nitrate (as N), mg/L	7.2	5.4	4.3	8.4	---
Quadruplicate TOC:					
TOC, Average, mg/L	<3	6	<3	15	---
TOC, Standard Deviation, mg/L	0	1.9	0	3.5	---
TOC, 1st Replicate, mg/L	<3	5	<3	14	---
TOC, 2nd Replicate, mg/L	<3	5	<3	14	---
TOC, 3rd Replicate, mg/L	<3	7	<3	20	---
TOC, 4th Replicate, mg/L	<3	9	<3	12	---
Quadruplicate Conductivity:					
Sp. Cond., Average, umhos/cm	1600	1300	1300	3100	---
Sp. Cond., Std. Deviation, umhos/cm	0	0	0	50	---
Sp. Cond., 1st Replicate, umhos/cm	1600	1300	1300	3000	---
Sp. Cond., 2nd Replicate, umhos/cm	1600	1300	1300	3100	---
Sp. Cond., 3rd Replicate, umhos/cm	1600	1300	1300	3100	---
Sp. Cond., 4th Replicate, umhos/cm	1600	1300	1300	3100	---

BROWN AND CALDWELL LABORATORIES

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10-284-4	W-09-(1750-1767)	13 OCT 87
10-284-5	W-00-(1730-1731)	13 OCT 87

PARAMETER	10-284-1	10-284-2	10-284-3	10-284-4	10-284-5
Quadruplicate pH:					
pH, Average, Units	7.125	7.025	7.1	6.875	---
pH, Standard Deviation, Units	0.05	0.05	0	0.05	---
pH, 1st Replicate, Units	7.1	7.0	7.1	6.9	---
pH, 2nd Replicate, Units	7.1	7.0	7.1	6.9	---
pH, 3rd Replicate, Units	7.2	7.0	7.1	6.8	---
pH, 4th Replicate, Units	7.1	7.1	7.1	6.9	---
Chloride, mg/L	180	100	120	630	---
Quadruplicate TOX:					
TOX, 1st Replicate, ug/L	<80	<80	<80	280	---
TOX, 2nd Replicate, ug/L	<80	<80	<80	280	---
TOX, 3rd Replicate, ug/L	<80	<80	<80	270	---
TOX, 4th Replicate, ug/L	<80	<80	<80	320	---
TOX, Average, ug/L	<80	<80	<80	290	---
TOX, Standard Deviation, ug/L	0	0	0	22	---
Cadmium, mg/L	<0.02	<0.02	<0.02	<0.02	---
Chromium, mg/L	<0.04	<0.04	<0.04	0.84	---
Copper, mg/L	<0.02	<0.02	<0.02	<0.02	---
Zinc, mg/L	<0.03	<0.03	<0.03	<0.03	---
Dissolved Digestion, Date	10/23/87	10/23/87	10/23/87	10/23/87	---

BROWN AND CALDWELL LABORATORIES

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10-284-4	W-09-(1750-1767)	13 OCT 87
10-284-5	W-00-(1730-1731)	13 OCT 87

PARAMETER	10-284-1	10-284-2	10-284-3	10-284-4	10-284-5
Halocarbons (EPA 601)					
Date Extracted	10/22/87	10/22/87	10/22/87	10/22/87	10/22/87
Dilution Factor, Times 1	1	1	1	1	1
1,1,2,2-Tetrachloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane, ug/L	2.5	0.89	45	130	<0.5
1,1-Dichloroethene, ug/L	0.94	0.85	5.5	84	<0.5
1,2-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene, ug/L	<0.5	<0.5	11	7.7	<0.5
1,2-Dichloropropane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chloroethylvinylether, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride, ug/L	<0.5	99	<0.5	<0.5	<0.5
Chloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform, ug/L	0.73	85	0.55	27	0.76
Chloromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5

BROWN AND CALDWELL LABORATORIES

373 SOUTH FAIR OAKS AVENUE PASADENA, CA 91105 • (818) 795-7553

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Ken Durand
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Project: 50-1014-3

REPORT OF ANALYTICAL RESULTS

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10-284-4	W-09-(1750-1767)	13 OCT 87
10-284-5	W-00-(1730-1731)	13 OCT 87

PARAMETER	10-284-1	10-284-2	10-284-3	10-284-4	10-284-5
Dichlorodifluoromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene chloride, ug/L	11	4.3	3.6	83	25
Tetrachloroethene, ug/L	0.72	0.55	0.63	3.9	<0.5
1,1,1-Trichloroethane, ug/L	<0.5	1.1	<0.5	4.8	<0.5
Trichloroethylene, ug/L	40	26	25	150	<0.5
Trichlorofluoromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl chloride, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5

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10-284-3	W-08-(1732-1749)	13 OCT 87
10-284-4	W-09-(1750-1767)	13 OCT 87
10-284-5	W-00-(1730-1731)	13 OCT 87

PARAMETER	10-284-1	10-284-2	10-284-3	10-284-4	10-284-5
Vol.Aromatics (EPA-602)					
Date Extracted	10/22/87	10/22/87	10/22/87	10/22/87	10/22/87
Dilution Factor, Times 1	1	1	1	1	1
Chlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Additional Compounds:					
Total Xylene Isomers, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5

Robert Peak for
Edward Wilson, Laboratory Director

AMENDED REPORT

1/5/88

BROWN AND CALDWELL LABORATORIES

373 SOUTH FAIR OAKS AVENUE PASADENA, CA 91105 • (818) 795-7553 • FAX (818) 795-8579

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Ken Durand
J. H. Kleinfelder & Associates
17100 Pioneer Blvd., Suite 350
Artesia, California 90701

Project: 50-1014-3

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
10-341-1	W-4A-(1770-1787) 50-1014-3	15 OCT 87
10-341-2	W-11-(1792-1809) 50-1014-3	15 OCT 87
10-341-3	W-10-(1812-1829) 50-1014-3	15 OCT 87
10-341-4	W-04-(1832-1849) 50-1014-3	15 OCT 87
10-341-5	W-00-(1788,1789) 50-1014-3	15 OCT 87

PARAMETER	10-341-1	10-341-2	10-341-3	10-341-4	10-341-5
Hexavalent Chromium, mg/L	<0.02	<0.02	<0.02	232	---
Nitrate Nitrogen					
Nitrate (as NO3), mg/L	27	6.8	<0.4	5.8	---
Nitrate (as N), mg/L	6.1	1.5	<0.1	1.3	---
Quadruplicate TOC:					
TOC, Average, mg/L	<3	61	56	90	---
TOC, Standard Deviation, mg/L	0	2.1	2.5	6.4	---
TOC, 1st Replicate, mg/L	<3	59	56	85	---
TOC, 2nd Replicate, mg/L	<3	64	54	86	---
TOC, 3rd Replicate, mg/L	<3	61	60	90	---
TOC, 4th Replicate, mg/L	<3	61	56	99	---
Quadruplicate Conductivity:					
Sp. Cond., Average, umhos/cm	1700	1600	1900	7300	---
Sp. Cond., Std. Deviation, umhos/cm	0	0	0	0	---
Sp. Cond., 1st Replicate, umhos/cm	1700	1600	1900	7300	---
Sp. Cond., 2nd Replicate, umhos/cm	1700	1600	1900	7300	---
Sp. Cond., 3rd Replicate, umhos/cm	1700	1600	1900	7300	---
Sp. Cond., 4th Replicate, umhos/cm	1700	1600	1900	7300	---

BROWN AND CALDWELL LABORATORIES

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ANALYTICAL REPORT

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Ken Durand
J. H. Kleinfelder & Associates
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Artesia, California 90701

Project: 50-1014-3

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
10-341-1	W-4A-(1770-1787) 50-1014-3	15 OCT 87
10-341-2	W-11-(1792-1809) 50-1014-3	15 OCT 87
10-341-3	W-10-(1812-1829) 50-1014-3	15 OCT 87
10-341-4	W-04-(1832-1849) 50-1014-3	15 OCT 87
10-341-5	W-00-(1788,1789) 50-1014-3	15 OCT 87

PARAMETER	10-341-1	10-341-2	10-341-3	10-341-4	10-341-5
Quadruplicate pH:					
pH, Average, Units	7.225	7.4	7.1	6.3	---
pH, Standard Deviation, Units	0.05	0	0	0	---
pH, 1st Replicate, Units	7.2	7.4	7.1	6.3	---
pH, 2nd Replicate, Units	7.2	7.4	7.1	6.3	---
pH, 3rd Replicate, Units	7.2	7.4	7.1	6.3	---
pH, 4th Replicate, Units	7.3	7.4	7.1	6.3	---
Chloride, mg/L	120	110	230	1800	---
Quadruplicate TOX:					
TOX, 1st Replicate, ug/L	<80	<80	180	2100	---
TOX, 2nd Replicate, ug/L	<80	<80	180	1700	---
TOX, 3rd Replicate, ug/L	<80	<80	190	1700	---
TOX, 4th Replicate, ug/L	<80	<80	170	1800	---
TOX, Average, ug/L	<80	<80	180	1800	---
TOX, Standard Deviation, ug/L	0	0	8	190	---
Cadmium, mg/L	<0.02	<0.02	<0.02	0.33	---
Chromium, mg/L	<0.04	<0.04	<0.04	190	---
Copper, mg/L	<0.02	<0.02	<0.02	<0.02	---
Zinc, mg/L	<0.03	<0.03	<0.03	<0.03	---
Dissolved Digestion, Date	10/27/87	10/27/87	10/27/87	10/27/87	---

BROWN AND CALDWELL LABORATORIES

373 SOUTH FAIR OAKS AVENUE PASADENA, CA 91105 • (818) 795-7553 • FAX (818) 795-8579

ANALYTICAL REPORT

LOG NO: P87-10-341

Received: 15 OCT 87
Reported: 03 NOV 87

Ken Durand
J. H. Kleinfelder & Associates
17100 Pioneer Blvd., Suite 350
Artesia, California 90701

Project: 50-1014-3

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
10-341-1	W-4A-(1770-1787) 50-1014-3	15 OCT 87
10-341-2	W-11-(1792-1809) 50-1014-3	15 OCT 87
10-341-3	W-10-(1812-1829) 50-1014-3	15 OCT 87
10-341-4	W-04-(1832-1849) 50-1014-3	15 OCT 87
10-341-5	W-00-(1788,1789) 50-1014-3	15 OCT 87

PARAMETER	10-341-1	10-341-2	10-341-3	10-341-4	10-341-5
Halocarbons (EPA 601)					
Date Extracted	10/25/87	10/25/87	10/25/87	10/25/87	10/25/87
Dilution Factor, Times 1	1	1	1	1	1
1,1,2,2-Tetrachloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane, ug/L	1.2	2.3	21	120	<0.5
1,1-Dichloroethene, ug/L	<0.5	2.6	28	110	<0.5
1,2-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane, ug/L	<0.5	89	93	100	<0.5
trans-1,2-Dichloroethene, ug/L	<0.5	<0.5	2.5	41	<0.5
1,2-Dichloropropane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chloroethylvinylether, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene, ug/L	<0.5	<0.5	<0.5	1.1	<0.5
Carbon Tetrachloride, ug/L	<0.5	<0.5	<0.5	1.5	<0.5
Chloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform, ug/L	<0.5	1.0	2.3	23	<0.5
Chloromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5

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REPORT OF ANALYTICAL RESULTS

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10-341-2	W-11-(1792-1809) 50-1014-3	15 OCT 87
10-341-3	W-10-(1812-1829) 50-1014-3	15 OCT 87
10-341-4	W-04-(1832-1849) 50-1014-3	15 OCT 87
10-341-5	W-00-(1788,1789) 50-1014-3	15 OCT 87

PARAMETER	10-341-1	10-341-2	10-341-3	10-341-4	10-341-5
Dichlorodifluoromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene chloride, ug/L	<0.5	<0.5	1.8	110	5.3
Tetrachloroethene, ug/L	<0.5	<0.5	1.5	4.5	<0.5
1,1,1-Trichloroethane, ug/L	<0.5	2.5	5.8	2.1	<0.5
Trichloroethylene, ug/L	3.2	36	130	190	<0.5
Trichlorofluoromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl chloride, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5

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10-341-3	W-10-(1812-1829) 50-1014-3	15 OCT 87
10-341-4	W-04-(1832-1849) 50-1014-3	15 OCT 87
10-341-5	W-00-(1788,1789) 50-1014-3	15 OCT 87

PARAMETER	10-341-1	10-341-2	10-341-3	10-341-4	10-341-5
Vol.Aromatics (EPA-602)					
Date Extracted	10/25/87	10/25/87	10/25/87	10/25/87	10/25/87
Dilution Factor, Times 1	1	1	1	1	1
Chlorobenzene, ug/L	<0.5	<0.5	<0.5	1.1	<0.5
1,2-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene, ug/L	<0.5	180	360	380	<0.5
Toluene, ug/L	<0.5	<0.5	<0.5	580	<0.5
Additional Compounds:					
Total Xylene Isomers, ug/L	<0.5	<0.5	<0.5	570	<0.5

Report amended 12/14/87 to correct 601 results for 1,2-DCA. -- J. Jones

Larry L. Chaleger for
Edward Wilson, Laboratory Director

AMENDED REPORT

11/5/88

BROWN AND CALDWELL LABORATORIES

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Project: 50-1014-3

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
10-201-1	W-01-(1617-1634) 50-1014-3	09 OCT 87
10-201-2	W-03-(1635-1652) 50-1014-3	09 OCT 87
10-201-3	W-6B-(1653-1670) 50-1014-3	09 OCT 87
10-201-4	W-07-(1673-1691) 50-1014-3	09 OCT 87
10-201-5	W-00-(1615-1616) 50-1014-3	09 OCT 87

PARAMETER	10-201-1	10-201-2	10-201-3	10-201-4	10-201-5
Hexavalent Chromium, mg/L	<0.02	<0.02	<0.02	<0.02	---
Nitrate Nitrogen					
Nitrate (as NO3), mg/L	11	23	37	18	---
Nitrate (as N), mg/L	2.5	5.2	8.4	4.1	---
Quadruplicate TOC:					
TOC, Average, mg/L	32	50	9	5	---
TOC, Standard Deviation, mg/L	1.4	1.7	2.5	1.0	---
TOC, 1st Replicate, mg/L	30	53	9	5	---
TOC, 2nd Replicate, mg/L	33	49	12	6	---
TOC, 3rd Replicate, mg/L	32	50	9	4	---
TOC, 4th Replicate, mg/L	33	50	6	6	---
Quadruplicate Conductivity:					
Sp. Cond., Average, umhos/cm	3800	3300	1400	5000	---
Sp. Cond., Std. Deviation, umhos/cm	0	50	0	0	---
Sp. Cond., 1st Replicate, umhos/cm	3800	3200	1400	4900	---
Sp. Cond., 2nd Replicate, umhos/cm	3800	3300	1400	5000	---
Sp. Cond., 3rd Replicate, umhos/cm	3800	3300	1400	5000	---
Sp. Cond., 4th Replicate, umhos/cm	3800	3300	1400	5000	---

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10-201-3	W-6B-(1653-1670) 50-1014-3	09 OCT 87
10-201-4	W-07-(1673-1691) 50-1014-3	09 OCT 87
10-201-5	W-00-(1615-1616) 50-1014-3	09 OCT 87

PARAMETER	10-201-1	10-201-2	10-201-3	10-201-4	10-201-5
Quadruplicate pH:					
pH, Average, Units	6.875	6.9	7.1	7.35	---
pH, Standard Deviation, Units	0.05	0	0	0.0577	---
pH, 1st Replicate, Units	6.9	6.9	7.1	7.4	---
pH, 2nd Replicate, Units	6.8	6.9	7.1	7.3	---
pH, 3rd Replicate, Units	6.9	6.9	7.1	7.4	---
pH, 4th Replicate, Units	6.9	6.9	7.1	7.3	---
Chloride, mg/L	770	740	94	1200	---
Quadruplicate TOX:					
TOX, 1st Replicate, ug/L	<80	250	<80	<80	---
TOX, 2nd Replicate, ug/L	<80	270	<80	<80	---
TOX, 3rd Replicate, ug/L	<80	280	<80	<80	---
TOX, 4th Replicate, ug/L	<80	270	<80	<80	---
TOX, Average, ug/L	<80	270	<80	<80	---
TOX, Standard Deviation, ug/L	0	13	0	0	---
Cadmium, mg/L	<0.02	<0.02	<0.02	<0.02	---
Chromium, mg/L	<0.04	<0.04	<0.04	<0.04	---
Copper, mg/L	<0.02	<0.02	<0.02	<0.02	---
Zinc, mg/L	<0.03	<0.03	<0.03	<0.03	---
Dissolved Digestion, Date	10/13/87	10/13/87	10/13/87	10/13/87	---

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REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
10-201-1	W-01-(1617-1634) 50-1014-3	09 OCT 87
10-201-2	W-03-(1635-1652) 50-1014-3	09 OCT 87
10-201-3	W-6B-(1653-1670) 50-1014-3	09 OCT 87
10-201-4	W-07-(1673-1691) 50-1014-3	09 OCT 87
10-201-5	W-00-(1615-1616) 50-1014-3	09 OCT 87

PARAMETER	10-201-1	10-201-2	10-201-3	10-201-4	10-201-5
Halocarbons (EPA 601)					
Date Extracted	10/19/87	10/19/87	10/19/87	10/19/87	10/19/87
Dilution Factor, Times 1	1	1	1	1	1
1,1,2,2-Tetrachloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane, ug/L	<0.5	6.9	<0.5	6.0	<0.5
1,1-Dichloroethene, ug/L	<0.5	15	<0.5	0.66	<0.5
1,2-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene, ug/L	0.75	2.2	<0.5	5.9	<0.5
1,2-Dichloropropane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chloroethylvinylether, ug/L	<0.5	43	<0.5	<0.5	<0.5
Bromodichloromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride, ug/L	<0.5	87	<0.5	<0.5	<0.5
Chloroethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform, ug/L	<0.5	<0.5	<0.5	<0.5	0.65
Chloromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5

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10-201-2	W-03-(1635-1652) 50-1014-3	09 OCT 87
10-201-3	W-6B-(1653-1670) 50-1014-3	09 OCT 87
10-201-4	W-07-(1673-1691) 50-1014-3	09 OCT 87
10-201-5	W-00-(1615-1616) 50-1014-3	09 OCT 87

PARAMETER	10-201-1	10-201-2	10-201-3	10-201-4	10-201-5
Dichlorodifluoromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene chloride, ug/L	1.7	9.6	1.2	1.1	17
Tetrachloroethene, ug/L	1.1	0.77	1.1	<0.5	<0.5
1,1,1-Trichloroethane, ug/L	<0.5	<0.5	0.64	<0.5	<0.5
Trichloroethylene, ug/L	2.4	150	33	36	<0.5
Trichlorofluoromethane, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl chloride, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: J.H. KLEINFELDER-SAN DIEGO	ATI I.D.	: 710124
PROJECT #	: 50-1014-3	DATE EXTRACTED	: 10/29/87
PROJECT NAME	: (NONE)	DATE ANALYZED	: 10/29/87
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
2-CHLOROETHYLVINYLETHER	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
TRANS-1,2-DICHLOROETHENE	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	0.71
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	100
TRIFLUOROTOLUENE (%)	102

BROWN AND CALDWELL LABORATORIES

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LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
10-201-1	W-01-(1617-1634) 50-1014-3	09 OCT 87
10-201-2	W-03-(1635-1652) 50-1014-3	09 OCT 87
10-201-3	W-6B-(1653-1670) 50-1014-3	09 OCT 87
10-201-4	W-07-(1673-1691) 50-1014-3	09 OCT 87
10-201-5	W-00-(1615-1616) 50-1014-3	09 OCT 87

PARAMETER	10-201-1	10-201-2	10-201-3	10-201-4	10-201-5
Vol.Aromatics (EPA-602)					
Date Extracted	10/18/87	10/18/87	10/18/87	10/18/87	10/18/87
Dilution Factor, Times 1	1	1	1	1	1
Chlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene, ug/L	<0.5	290	<0.5	<0.5	<0.5
Toluene, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
Additional Compounds:					
Total Xylene Isomers, ug/L	<0.5	<0.5	<0.5	<0.5	<0.5

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Reported: 21 OCT 87

Ken Durand
J. H. Kleinfelder & Associates
17100 Pioneer Blvd., Suite 350
Artesia, California 90701

Project: 50-1014-3

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
10-201-6	W-00-(1671-1672) 50-1014-3	09 OCT 87
10-201-7	W-00-(1692-1693) 50-1014-3	09 OCT 87

PARAMETER	10-201-6	10-201-7
Halocarbons (EPA 601)		
Date Extracted	10/19/87	10/19/87
Dilution Factor, Times 1	1	1
1,1,2,2-Tetrachloroethane, ug/L	<0.5	<0.5
1,1,2-Trichloroethane, ug/L	<0.5	<0.5
1,1-Dichloroethane, ug/L	<0.5	<0.5
1,1-Dichloroethene, ug/L	<0.5	<0.5
1,2-Dichlorobenzene, ug/L	<0.5	<0.5
1,2-Dichloroethane, ug/L	<0.5	<0.5
trans-1,2-Dichloroethene, ug/L	<0.5	<0.5
1,2-Dichloropropane, ug/L	<0.5	<0.5
1,3-Dichlorobenzene, ug/L	<0.5	<0.5
1,4-Dichlorobenzene, ug/L	<0.5	<0.5
2-Chloroethylvinylether, ug/L	<0.5	<0.5
Bromodichloromethane, ug/L	<0.5	<0.5
Bromomethane, ug/L	<0.5	<0.5
Bromoform, ug/L	<0.5	<0.5
Chlorobenzene, ug/L	<0.5	<0.5
Carbon Tetrachloride, ug/L	<0.5	<0.5
Chloroethane, ug/L	<0.5	<0.5
Chloroform, ug/L	0.73	<0.5
Chloromethane, ug/L	<0.5	<0.5
Dibromochloromethane, ug/L	<0.5	<0.5
Dichlorodifluoromethane, ug/L	<0.5	<0.5
Methylene chloride, ug/L	20	95
Tetrachloroethene, ug/L	<0.5	0.74

BROWN AND CALDWELL LABORATORIES
373 SOUTH FAIR OAKS AVENUE PASADENA, CA 91105 • (818) 795-7553 • FAX (818) 795-8579

ANALYTICAL REPORT

LOG NO: P87-10-201

Received: 09 OCT 87
Reported: 21 OCT 87

Ken Durand
J. H. Kleinfelder & Associates
17100 Pioneer Blvd., Suite 350
Artesia, California 90701

Project: 50-1014-3

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
10-201-6	W-00-(1671-1672) 50-1014-3	09 OCT 87
10-201-7	W-00-(1692-1693) 50-1014-3	09 OCT 87

PARAMETER	10-201-6	10-201-7
1,1,1-Trichloroethane, ug/L	<0.5	<0.5
Trichloroethylene, ug/L	<0.5	87
Trichlorofluoromethane, ug/L	<0.5	<0.5
Vinyl chloride, ug/L	<0.5	<0.5
cis-1,3-Dichloropropene, ug/L	<0.5	<0.5
trans-1,3-Dichloropropene, ug/L	<0.5	<0.5
Vol.Aromatics (EPA-602)		
Date Extracted	10/18/87	10/18/87
Dilution Factor, Times 1	1	1
Chlorobenzene, ug/L	<0.5	<0.5
1,2-Dichlorobenzene, ug/L	<0.5	<0.5
1,3-Dichlorobenzene, ug/L	<0.5	<0.5
1,4-Dichlorobenzene, ug/L	<0.5	<0.5
Benzene, ug/L	<0.5	<0.5
Ethylbenzene, ug/L	<0.5	160
Toluene, ug/L	<0.5	220
Additional Compounds:		
Total Xylene Isomers, ug/L	<0.5	<0.5

Report amended 12/11/87 to correct data entry error on -7. -- J. Jones

Larry L. Shaleger for
Edward Wilson, Laboratory Director

Analytical**Technologies,** Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D. 710124

November 5, 1987

J. H. Kleinfelder & Associates
9771 Clairemont Mesa Blvd., Suite G
San Diego, California 92124

Project No.: 50-1014-3

Attention: Mike Chapin

On October 15, 1987, Analytical Technologies, Inc. received five water samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. Please see the attached sheet for the sample cross reference.

The results, sample cross reference, and the quality control data are enclosed.

Patricia A. Schroder
GC Supervisor

Richard M. Amano
Laboratory Manager

PS:mag

Analytical Technologies, Inc.

ATI I.D. 710124

ANALYTICAL SCHEDULE

CLIENT: J.H. KLEINFELDER-SAN DIEGO PROJECT NO.: 50-1014-3
PROJECT NAME: (NONE)

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
PURGEABLE HALOCARBONS	GC/HALL	EPA 601
PURGEABLE AROMATICS	GC/PID	EPA 602

Analytical Technologies, Inc.

CLIENT : J.H. KLEINFELDER-SAN DIEGO DATE RECEIVED : 10/15/87
PROJECT # : 50-1014-3
PROJECT NAME : (NONE) REPORT DATE : 11/05/87
ATI I.D. : 710124

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	W-4A-1768,1769	WATER	10/15/87
02	W-11-1790,1791	WATER	10/15/87
03	W-10-1810,1811	WATER	10/15/87
04	W-04-1830,1831	WATER	10/15/87
05	W-00-1850,1851	WATER	10/15/87

----- TOTALS -----

MATRIX	# SAMPLES
WATER	5

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 71012401

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: J.H. KLEINFELDER-SAN DIEGO	DATE SAMPLED	: 10/15/87
PROJECT #	: 50-1014-3	DATE RECEIVED	: 10/15/87
PROJECT NAME	: (NONE)	DATE EXTRACTED	: N/A
CLIENT I.D.	: W-4A-1768,1769	DATE ANALYZED	: 10/23/87
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
2-CHLOROETHYLVINYLETHER	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	0.42
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
TRANS-1,2-DICHLOROETHENE	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	1.1
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5
SURROGATE PERCENT RECOVERIES	
BROMOCHLOROMETHANE (%)	73
TRIFLUOROTOLUENE (%)	94

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 71012405

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: KLEINFELDER-SAN DIEGO	DATE SAMPLED	: 10/15/87
PROJECT #	: 50-1014-3	DATE RECEIVED	: 10/15/87
PROJECT NAME	: (NONE)	DATE EXTRACTED	: N/A
CLIENT I.D.	: W-00-1850,1851	DATE ANALYZED	: 10/29/87
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	0.58
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
2-CHLOROETHYLVINYLETHER	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
TRANS-1,2-DICHLOROETHENE	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	110
METHYLENE CHLORIDE	35
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	140
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	44
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	90
TRIFLUOROTOLUENE (%)	108

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 71012404

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: J.H. KLEINFELDER-SAN DIEGO	DATE SAMPLED	: 10/15/87
PROJECT #	: 50-1014-3	DATE RECEIVED	: 10/15/87
PROJECT NAME	: (NONE)	DATE EXTRACTED	: N/A
CLIENT I.D.	: W-04-1830,1831	DATE ANALYZED	: 10/24/87
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 100

COMPOUNDS	RESULTS
BENZENE	<50
BROMODICHLOROMETHANE	<20
BROMOFORM	<20
BROMOMETHANE	<20
CARBON TETRACHLORIDE	<20
CHLOROBENZENE	<50
CHLOROETHANE	<20
2-CHLOROETHYLVINYLETHER	<20
CHLOROFORM	<20
CHLOROMETHANE	<20
DIBROMOCHLOROMETHANE	<20
1,2-DICHLOROBENZENE	<50
1,3-DICHLOROBENZENE	<50
1,4-DICHLOROBENZENE	<50
DICHLORODIFLUOROMETHANE	<20
1,1-DICHLOROETHANE	150
1,2-DICHLOROETHANE	84
1,1-DICHLOROETHENE	80
TRANS-1,2-DICHLOROETHENE	33
1,2-DICHLOROPROPANE	<20
CIS-1,3-DICHLOROPROPENE	<20
TRANS-1,3-DICHLOROPROPENE	<20
ETHYLBENZENE	440
METHYLENE CHLORIDE	<200
1,1,2,2-TETRACHLOROETHANE	<20
TETRACHLOROETHENE	<20
TOLUENE	970
1,1,1-TRICHLOROETHANE	<20
1,1,2-TRICHLOROETHANE	<20
TRICHLOROETHENE	350
TRICHLOROFLUOROMETHANE	<200
VINYL CHLORIDE	<20
META XYLENE	360
ORTHO & PARA XYLENE	1100

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	84
TRIFLUOROTOLUENE (%)	86

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 71012403

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: J.H. KLEINFELDER-SAN DIEGO	DATE SAMPLED	: 10/15/87
PROJECT #	: 50-1014-3	DATE RECEIVED	: 10/15/87
PROJECT NAME	: (NONE)	DATE EXTRACTED	: N/A
CLIENT I.D.	: W-10-1810,1811	DATE ANALYZED	: 10/21/87
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 10

COMPOUNDS	RESULTS
BENZENE	<5.0
BROMODICHLOROMETHANE	<2.0
BROMOFORM	<2.0
BROMOMETHANE	<2.0
CARBON TETRACHLORIDE	<2.0
CHLOROBENZENE	<5.0
CHLOROETHANE	<2.0
2-CHLOROETHYLVINYLETHER	<2.0
CHLOROFORM	<2.0
CHLOROMETHANE	<2.0
DIBROMOCHLOROMETHANE	<2.0
1,2-DICHLOROBENZENE	<5.0
1,3-DICHLOROBENZENE	<5.0
1,4-DICHLOROBENZENE	<5.0
DICHLORODIFLUOROMETHANE	<2.0
1,1-DICHLOROETHANE	19
1,2-DICHLOROETHANE	94
1,1-DICHLOROETHENE	21
TRANS-1,2-DICHLOROETHENE	2.4
1,2-DICHLOROPROPANE	<2.0
CIS-1,3-DICHLOROPROPENE	<2.0
TRANS-1,3-DICHLOROPROPENE	<2.0
ETHYLBENZENE	300
METHYLENE CHLORIDE	<20
1,1,2,2-TETRACHLOROETHANE	<2.0
TETRACHLOROETHENE	<2.0
TOLUENE	<5.0
1,1,1-TRICHLOROETHANE	3.9
1,1,2-TRICHLOROETHANE	<2.0
TRICHLOROETHENE	110
TRICHLOROFLUOROMETHANE	<20
VINYL CHLORIDE	<2.0
META XYLENE	<5.0
ORTHO & PARA XYLENE	<5.0

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	89
TRIFLUOROTOLUENE (%)	93

GAS CHROMATOGRAPHY - RESULTS

Analytical**Technologies,** Inc. Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D. : 71012402

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: KLEINFELDER-SAN DIEGO	DATE SAMPLED	: 10/15/87
PROJECT #	: 50-1014-3	DATE RECEIVED	: 10/15/87
PROJECT NAME	: (NONE)	DATE EXTRACTED	: N/A
CLIENT I.D.	: W-11-1790,1791	DATE ANALYZED	: 10/21/87
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 10

COMPOUNDS	RESULTS
BENZENE	<5.0
BROMODICHLOROMETHANE	<2.0
BROMOFORM	<2.0
BROMOMETHANE	<2.0
CARBON TETRACHLORIDE	<2.0
CHLOROBENZENE	<5.0
CHLOROETHANE	<2.0
2-CHLOROETHYLVINYLETHER	<2.0
CHLOROFORM	<2.0
CHLOROMETHANE	<2.0
DIBROMOCHLOROMETHANE	<2.0
1,2-DICHLOROBENZENE	<5.0
1,3-DICHLOROBENZENE	<5.0
1,4-DICHLOROBENZENE	<5.0
DICHLORODIFLUOROMETHANE	<2.0
1,1-DICHLOROETHANE	3.7
1,2-DICHLOROETHANE	75
1,1-DICHLOROETHENE	<2.0
TRANS-1,2-DICHLOROETHENE	<2.0
1,2-DICHLOROPROPANE	<2.0
CIS-1,3-DICHLOROPROPENE	<2.0
TRANS-1,3-DICHLOROPROPENE	<2.0
ETHYLBENZENE	150
METHYLENE CHLORIDE	<20.0
1,1,2,2-TETRACHLOROETHANE	<2.0
TETRACHLOROETHENE	<2.0
TOLUENE	<5.0
1,1,1-TRICHLOROETHANE	<2.0
1,1,2-TRICHLOROETHANE	<2.0
TRICHLOROETHENE	19
TRICHLOROFLUOROMETHANE	<20.0
VINYL CHLORIDE	<2.0
META XYLENE	<5.0
ORTHO & PARA XYLENE	<5.0
SURROGATE PERCENT RECOVERIES	
BROMOCHLOROMETHANE (%)	79
TRIFLUOROTOLUENE (%)	91

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: J.H. KLEINFELDER-SAN DIEGO	ATI I.D.	: 710124
PROJECT #	: 50-1014-3	DATE EXTRACTED	: 10/21/87
PROJECT NAME	: (NONE)	DATE ANALYZED	: 10/21/87
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
2-CHLOROETHYLVINYLETHER	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
TRANS-1,2-DICHLOROETHENE	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	81
TRIFLUOROTOLUENE (%)	107

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: J.H. KLEINFELDER-SAN DIEGO	ATI I.D.	: 710124
PROJECT #	: 50-1014-3	DATE EXTRACTED	: 10/23/87
PROJECT NAME	: (NONE)	DATE ANALYZED	: 10/23/87
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
2-CHLOROETHYLVINYLETHER	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
TRANS-1,2-DICHLOROETHENE	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	0.80

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	91
TRIFLUOROTOLUENE (%)	106

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: J.H. KLEINFELDER-SAN DIEGO	ATI I.D.	: 710124
PROJECT #	: 50-1014-3	DATE EXTRACTED	: 10/24/87
PROJECT NAME	: (NONE)	DATE ANALYZED	: 10/24/87
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
2-CHLOROETHYLVINYLETHER	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
TRANS-1,2-DICHLOROETHENE	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	76
TRIFLUOROTOLUENE (%)	96

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

		ATI I.D.	: 710124
CLIENT	: J.H. KLEINFELDER-SAN DIEGO	DATE EXTRACTED	: 10/29/87
PROJECT #	: 50-1014-3	DATE ANALYZED	: 10/29/87
PROJECT NAME	: (NONE)	UNITS	: UG/L
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
2-CHLOROETHYLVINYLETHER	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
TRANS-1,2-DICHLOROETHENE	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	0.71
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	100
TRIFLUOROTOLUENE (%)	102

Chemical Research Laboratories, Inc.
SOUTHERN CALIFORNIA DIVISION
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • FAX: (714) 891-5917 • (800) LAB-1CRL

J.H. KLEINFELDER & ASSOCIATES
17100 Pioneer Blvd. Ste. 350
Artesia, CA 90701
ATTN: Ken Durand

ANALYSIS NO.: 728121-001/002
ANALYSES: EPA Method 601,602
DATE SAMPLED: 10/08/87
DATE SAMPLE REC'D: 10/08/87
PROJECT: Organic Spikes in H_2O

The following tests were performed on the samples received:

TEST	METHOD	REFERENCE	COMMENTS
Halogenated Volatile Organics (liquid)	EPA 601	SW846,1986	GC/Hall detector
Aromatic Volatile Organics (Liquid)	EPA 602	SW846,1986	GC/Hall detector

Chemical Research Laboratories, Inc.
SOUTHERN CALIFORNIA DIVISION
7440 Lincoln Way ● Garden Grove, CA 92641
(714) 898-6370 ● FAX: (714) 891-5917 ● (800) LAB-1CRL

RECEIVED
OCT 27 1987
Ans'd .....

October 19, 1987

J.H. KLEINFELDER & ASSOCIATES
17100 Pioneer Blvd. Ste. 350
Artesia, CA 90701
ATTN: Ken Durand

ANALYSIS NO.: 728121-001/002
ANALYSES: EPA Method 601,602
DATE SAMPLED: 10/08/87
DATE SAMPLE REC'D: 10/08/87
PROJECT: Organic Spikes in H_2O

Enclosed with this letter is the report on the chemical and physical analyses on the samples from ANALYSIS NO: 728121-001/002 shown above.

Two liquid samples were received by CRL in a chilled state, intact, and with a chain-of-custody attached.

REVIEWED AND APPROVED

10/23/87
DATE

Chemical Research Laboratories, Inc.
SOUTHERN CALIFORNIA DIVISION
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • FAX: (714) 891-5917 • (800) LAB-1CRL

LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES
17100 Pioneer Blvd. Ste. 350
Artesia, CA 90701
ATTN: Ken Durand

SAMPLE ID: SAMPLE #5

ANALYSIS NO.: 728121-001
ANALYSES: EPA Method 601
DATE SAMPLED: 10/08/87
DATE SAMPLE REC'D: 10/08/87
DATE ANALYZED: 10/13/87
SAMPLE TYPE: Liquid
PROJECT: Organic Spikes in H_2O

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	BLANK	DETECTION LIMITS
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	55.	2.	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	3.	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trans-1,3-Dichloropene	ND	ND	1.
Trichloroethene	73.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethylvinylether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

NOTE: All result values are blank subtracted.

Chemical Research Laboratories, Inc.
SOUTHERN CALIFORNIA DIVISION
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • FAX: (714) 891-5917 • (800) LAB-1CRL

LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES
17100 Pioneer Blvd. Ste. 350
Artesia, CA 90701
ATTN: Ken Durand

SAMPLE ID: SAMPLE #6

ANALYSIS NO.: 728121-002
ANALYSES: EPA Method 601
DATE SAMPLED: 10/08/87
DATE SAMPLE REC'D: 10/08/87
DATE ANALYZED: 10/13/87
SAMPLE TYPE: Liquid
PROJECT: Organic Spikes in H_2O

EPA METHOD 601 HALOGENATED VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULT	BLANK	DETECTION LIMITS
Chloromethane	ND	ND	1.
Bromomethane	ND	ND	1.
Vinyl Chloride	ND	ND	1.
Chloroethane	ND	ND	1.
Methylene Chloride	22.	2.	1.
1,1-Dichloroethene	ND	ND	1.
1,1-Dichloroethane	ND	ND	1.
Trans-1,2-Dichloroethene	ND	ND	1.
Chloroform	ND	3.	1.
1,2-Dichloroethane	ND	ND	1.
1,1,1-Trichloroethane	ND	ND	1.
Carbon Tetrachloride	ND	ND	1.
Trichlorofluoromethane	ND	ND	1.
1,2-Dichloropropane	ND	ND	1.
Trans-1,3-Dichloropene	ND	ND	1.
Trichloroethene	72.	ND	1.
Dibromochloromethane	ND	ND	1.
1,1,2-Trichloroethane	ND	ND	1.
cis-1,3-Dichloropropene	ND	ND	1.
2-Chloroethylvinylether	ND	ND	1.
Bromoform	ND	ND	1.
Tetrachloroethene	ND	ND	1.
1,1,2,2-Tetrachloroethane	ND	ND	1.
Chlorobenzene	ND	ND	1.
Bromodichloromethane	ND	ND	1.
1,2-Dichlorobenzene	ND	ND	1.
1,3-Dichlorobenzene	ND	ND	1.
1,4-Dichlorobenzene	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

NOTE: All result values are blank subtracted.

Chemical Research Laboratories, Inc.
SOUTHERN CALIFORNIA DIVISION
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • FAX: (714) 891-5917 • (800) LAB-1CRL

LABORATORY REPORT

J.H. KLEINFELDER & ASSOCIATES
17100 Pioneer Blvd. Ste. 350
Artesia, CA 90701
ATTN: Ken Durand

SAMPLE ID: SAMPLE #6

ANALYSIS NO.: 728121-002
ANALYSES: EPA Method 602
DATE SAMPLED: 10/08/87
DATE SAMPLE REC'D: 10/08/87
DATE ANALYZED: 10/13/87
SAMPLE TYPE: Liquid
PROJECT: Organic Spikes in H_2O

EPA METHOD 602 AROMATIC VOLATILE ORGANICS

UNITS: ug/L

COMPOUND	RESULTS	BLANK	DETECTION LIMIT
Benzene	ND	ND	0.7
Chlorobenzene	See 8010 results		
1,4-Dichlorobenzene	See 8010 results		
1,3-Dichlorobenzene	See 8010 results		
1,2-Dichlorobenzene	See 8010 results		
Ethyl Benzene	135.	ND	1.
Toluene	190.	ND	1.
Xylenes	ND	ND	1.

ND denotes compound was not detected at the detection limit indicated.

NOTE: All result values are blank subtracted.

Chemical Research Laboratories, Inc.
SOUTHERN CALIFORNIA DIVISION
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • FAX: (714) 891-5917 • (800) LAB-1CRL

QA/QC SUMMARY

J.H. KLEINFELDER & ASSOCIATES
17100 Pioneer Blvd. Ste. 350
Artesia, CA 90701
ATTN: Ken Durand

ANALYSIS NO.: 728121-001/002
ANALYSES: EPA Method 601,602
DATE SAMPLED: 10/08/87
DATE SAMPLE REC'D: 10/08/87
PROJECT: Organic Spikes in H_2O

ORGANIC ANALYSES QA/QC SUMMARY

Date	Parameter(Method)	Average Recovery (%)	Recovery Limits (%)	Duplicate RPD (%)	RPD Limits (%)
07/06/87	TOLUENE(EPA 8020/602)	105	60-120	8	40
07/06/87	XYLENE (EPA 8020/602)	97	60-120	2	40
07/06/87	1,1-DCE(EPA 8010/601)	96	60-120	5	40
07/06/87	CHLOROBENZENE (EPA 8010/601)	99	60-120	2	40

APPENDIX C

CHAIN OF CUSTODY RECORD

P87-10-201

RECEIVED
OCT 15 1987

SAMPLERS: *(Signature)*
Mark Ekhl

Phone: 213/ 860-5559

SHIP TO:
Brown & Caldwell
Pasadena CA

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper Kleinfelder

Address Artesia

Date Shipped 10/9/87

Shipment Service BOC

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekhl	Brian Carroll	10/9/87 1656
Brian Carroll		10-9-87 1807
	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
MW-00-1615	SD-1014-3	10/5/87	EPA Col 8602	
V 1616				
MW-01 1617			EPA 601 8602	
1618				
1619			CL.	
1620			Cd. Cu. Cr Zn	
1621			N-NO_3	
1622			pH Cond	
1623			QUAL: V	
1624				
1625			QUAL: TOC	
1626				
1627				
1628		V	V	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

P87-10-201

SAMPLERS: *(Signature)*

Mark Ekbl

Phone: 213/960-5559

SHIP TO:

Kramer & Caldwell

Pasadena CA

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper Kleinfelder

Address Azusa

Date Shipped 10/9/87

Shipment Service UPS

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekbl	Brian Carroll	10-9-87 1656
Brian Carroll		10-9-87 1806
	Receive for laboratory by*: *(Signature)*	

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-01-1629	KO-1629-3	10/9/87	TOC	
1630			TCX	
1631				
1632				
1633				
1634			Cr+6	
W-03-1635			EPA 601 & 602	
1636				
1637			CL	
1638			Cd, Cu, Cr, Zn	
1639			Ni-NO3	
1640			pH Cond	
1641				
1642				

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

P87-10-201

SAMPLERS: *(Signature)* Mark Ekland

Phone: 213/860 5559

SHIP TO: Brown & Caldwell Pasadena CA

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper Kleinfelder

Address Anaheim

Date Shipped 10/8/87

Shipment Service B&C

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekland	Brian Carroll	10-9-87 1656
Brian Carroll	Joan McRae	10-9-87 1806
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-GB-1643	SD-10W-2	10/7/87	PH COND	
1644			TOC	
1645			QUAD	
1646				
1647				
1648			TOX	
1649			QUAD	
1650				
1651				
1652			Cr^{+6}	
W-GB-1653			EPA 601 & 602	
1654				
1655			CC	
1656			Cd, Cu, Cr, Zn	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD P87-10-201

SAMPLERS: *(Signature)* Mark Ekblad

Phone: 213/860-5559

SHIP TO: Brown & Caldwell
Pasadena CA

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper: Kleinfelder

Address: Antech

Date Shipped: 10/9/87

Shipment Service: FDC

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekblad	Brian Carroll	10-9-87 1656
Brian Carroll		10-9-87 1806
	Receive for laboratory by*: *(Signature)*	

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-GB-1657	SD-1614-3	10/8/87	$N\text{-}NO_3$	
1658			pH cond	
1659				
1660				
1661				
1662			TOC	
1663				
1664				
1665				
1666			TOC	
1667				
1668				
1669				
1670			Cr^{+6}	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD P87-10-201

SAMPLERS: *(Signature)* Mark Ekelund

Phone: 213/860-5559

SHIP TO: Brian Carroll, Pasadena CA

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper: Kleinfelder

Address: Atlanta

Date Shipped: 10/9/87

Shipment Service: BRC

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekelund	Brian Carroll	10-9-87 1656
Relinquished by: *(Signature)* Brian Carroll	Received by: *(Signature)* Evan McLee	Date/Time 10-9-87 1806
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-00 1671	SS 1014-3	10/9/87	EPA 601 8602	
1672				
W-01-1673			EPA 601 8602	
1674				
1675			CC	
1676			Cd Cr Pb Zn	
1678			N-NO3	
1679			OH - con't	
1680				
1681				
1682				
1683			TCC	
1684				
1685				

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

P87-10-201

SAMPLERS: *(Signature)* Mark Ekel

Phone: 213/860-5559

SHIP TO: Brown & Caldwell
Modesto CA

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper Kleinfelder

Address Ontario

Date Shipped 10/8/87

Shipment Service BAC

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekel	Brian Carroll	10-9-87 1655
Brian Carroll	Fran McKee	10-9-87 1806
	Receive for laboratory by*: *(Signature)*	

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-87-1686	SD-1614-3	10/5/87	TOC	
1687			TOX	
1688				
1689				
1690				
1691			Cr+6	
W-87-1692			EPA 601 8602	
1693				

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

SAMPLERS: *(Signature)* Mark Ekhl

Phone:

SHIP TO: Brown & Caldwell, Pasadena

ATTENTION:

Phone No.

SHIPPING INFORMATION

P87-10-284

Shipper: Kleinfelder

Address: Artesia

Date Shipped: 10/13/87

Shipment Service: B & C

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekhl	Brian Carroll	10-13-87 1708
Brian Carroll	K R Patel	10/13/87 1000
	Receive for laboratory by*: *(Signature)*	

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-02-1694	50-1014-3	10/13/87	EPA 601 &	
1695	↓	↓	602	
1696			CL	
1697			CD, Cu, Cr, Zn	
1698			N-NO3	
1699			pH cond	
1700			↓	
1701				
1702				
1703			TOC	
1704			↓	
1705				
1706				
1707			TCY	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates   Canary - Laboratory Courtesy Copy   Pink - Sampler

CHAIN OF CUSTODY RECORD

SAMPLERS: *(Signature)* Mark Ebbl

Phone: _____

SHIP TO: Brown & Caldwell
Pasadena CA

ATTENTION: _____

Phone No. _____

SHIPPING INFORMATION

P87-10-284

Shipper Kleinfelder

Address Irvine

Date Shipped 10/13/87

Shipment Service BFC

Airbill No. _____

Cooler No. _____

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ebbl	Brian Carroll	10-13-87 1708
Brian Carroll	K K Patel	10/13/87 1000
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-02-1708	SD-1014-3	10/13/87	TCX	
1709				
1710				
1711			Cr+6	
W-05-1712			EPA 601 8602	
1713				
1714			CC	
1715			Cd, Cu, Cr+, Zn	
1716			NO3-N	
1717			pH cond	
1718				
1719				
1720				
1721			TOC	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4) _____

(5) _____

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

SAMPLERS: *(Signature)* Mark Ekel

Phone: _____

SHIP TO: Brown & Caldwell, Pasadena CA

ATTENTION: _____

Phone No. _____

SHIPPING INFORMATION

P87-10-284

Shipper Klein Felder

Address _____

Date Shipped 10/13/87

Shipment Service _____

Airbill No. _____

Cooler No. _____

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekel	Brian Carroll	10/13/87 1700
Relinquished by: *(Signature)* Brian Carroll	Received by: *(Signature)* K R Patel	Date/Time 10/13/87 2000
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-05-1722	SD-4/014-3	10/13/87	TOC	
1723				
1724				
1725			TOX	
1726				
1727				
1728				
1729			Cr^{+6}	
W-00-1730			EPA 601 & 602	
1731				
W-05-1732			EPA 601 & 602	
1733				
1734			Cl	
1735			Cd, Cu, Cr^{+} Zn	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4) _____

(5) _____

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

SAMPLERS: *(Signature)* Mark Ekhof

Phone:

SHIP TO: Brown & Caldwell
Pasadena

ATTENTION:

Phone No.

SHIPPING INFORMATION

P87-10-284

Shipper Kleinfelder

Address Artesia

Date Shipped 10/12/87

Shipment Service RK

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekhof	Brian Carroll	10-13-87 1708
Relinquished by: *(Signature)* Brian Carroll	Received by: *(Signature)* K Patel	Date/Time 10/13/87 1000
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-08-1736	50-104-3	10/13/87	N-NO3	
1737			pH Cond	
1738				
1739				
1740				
1741			TOC	
1742				
1743				
1744				
1745			TOX	
1746				
1747				
1748				
1749			Cr+6	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

SAMPLERS: *(Signature)* Mark Ebell

Phone: _____

SHIP TO: Brian Carroll
Piedmont Ca

ATTENTION: _____

Phone No. _____

SHIPPING INFORMATION

P87-10-284

Shipper Kleinfelder

Address Alameda

Date Shipped 10/12/87

Shipment Service UPS

Airbill No. _____

Cooler No. _____

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ebell	Brian Carroll	10-13-87 1700
Relinquished by: *(Signature)* Brian Carroll	Received by: *(Signature)* K Patel	Date/Time 10/13/87 1000
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-09-1750	SO-101-3	10/13/87	EPA 601 & 602	
1751				
1752			CL	
1753			Cd, Cr, Cu, Zn	
1754			NO3	
1755			pH, Cond	
1756				
1757				
1758				
1759			TOC	
1760				
1761				
1762				
1763			TOX	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4) _____

(5) _____

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

SAMPLERS: *(Signature)* Mark Ekhd

Phone:

SHIP TO: Brown & Caldwell
Pasadena

ATTENTION:

Phone No.

SHIPPING INFORMATION

P87-10-284

Shipper Kleinfelder

Address [illegible]

Date Shipped 10/13/87

Shipment Service B&C

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekhd	Brian Carroll	10-13-87 1708
Brian Carroll	KPatel	10/13/87 1002
	Receive for laboratory by*: *(Signature)*	

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-C9-1764	50-1014-3	50-1014-3	TCX	
1765	↓	↓	↓	
1766	↓	↓	↓	
1767	↓	↓	C, TC	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates   Canary - Laboratory Courtesy Copy   Pink - Sampler

CHAIN OF CUSTODY RECORD

P87-10-341

RECEIVED
OCT 21 1987

SAMPLERS: *(Signature)* Mark Ekl

Phone:

SHIP TO: Bonner & Caldwell
Carlsbad CA

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper Kleinfelder

Address Anaheim

Date Shipped 10/15/87

Shipment Service UPS

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekl	C Stan	10/15/87 5:15
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
~~W-44-1768~~	~~50-1044-3~~	~~10/15/87~~		
~~1769~~				
1770			EM Cal E	
1771			602	
1772			CC	
1773			Cd, Cu, Cr, Zn	
1774			N-NO3	
1775			pH Cond	
1776				
1777				
1778				
1779			TOC	
1780				
1781				

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

P87-10-341

SAMPLERS: *(Signature)* Mark Ekdl

Phone:

SHIP TO: Brian E Caldwell
President CA

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper Kleinfelder

Address Alesia

Date Shipped 10/15/87

Shipment Service LFC

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekdl	CS Bm	10/16/87 6:15P
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-4A-1782	50-10W-3	10/15/87	TOC	
1783			TOX	
1784				
1785				
1786				
1787			Cr+6	
W-00-1788			EPA 601 8602	
1789				
W-4-1790				
1791				
1792			EPA 601 8602	
1793				
1794			CC	
1795			Cd, Cu, Cr, Zn	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

P87-10-341

SAMPLERS: *(Signature)* Mark Ekdahl

Phone:

SHIP TO: Evans & Caldwell / Macdonald Co

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper Kleinfelder

Address Artesia

Date Shipped 10/15/87

Shipment Service BAC

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekdahl	CS Bar	10/15/87 515
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-11-1796	50-10M-3	10/15/87	M-NO3	
1797			pH COND	
1798				
1799				
1800				
1801			TCC	
1802				
1803				
1804				
1805			TCX	
1806				
1807				
1808				
1809			Cr+6	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

P87-10-341

CHAIN OF COFUSTODY RECORD

SAMPLERS: *(Signature)* Mark Ekbl

Phone:

SHIP TO: Brown & Caldwell
Pasadena CA

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper: Kleinfelder
Address: Irvine
Date Shipped: 10/15/87
Shipment Service: BEC
Airbill No.
Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekbl	CS Brown	10/15/87
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
~~W-10-1810~~	~~57-104-3~~	~~10/15/87~~		
~~1811~~				
1812			EPA 601 & 602	
1813				
1814			CL	
1815			Cd, Cu, Cr, Zn	
1816			N-NO3	
1817			pH cond	
1818				
1819				
1820				
1821			TOC	
1822				
1823				

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated
(4)
(5)

White - J. H. Kleinfelder & Associates   Canary - Laboratory Courtesy Copy   Pink - Sampler

CHAIN OF CUSTODY RECORD

P87-10-341

SAMPLERS: *(Signature)* Mark Ekhoff

Phone:

SHIP TO: Byron & Caldwell
Woodland CA

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper Woodland

Address

Date Shipped

Shipment Service DSC

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Mark Ekhoff	CS Bom	10/[illegible] 515P
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-10 1826	SD-1014-3	10/15/87	TOC	
1827			TOX	
1828				
1829			Cr+6	
W-04 ~~1830~~				
~~1831~~				
1832			EPA 601 2602	
1833				
1834			Cl	
1835			Cd, Cu, Cr, Zn	
1836			N-NO3	
1837			pH cond	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4)

(5)

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

P87-10-341

SAMPLERS: *(Signature)* Mark Ebell

Phone: _____

SHIP TO: Brown & Caldwell
Pasadena CA

ATTENTION: _____

Phone No. _____

SHIPPING INFORMATION

Shipper Kleinfelder Lab

Address Anaheim

Date Shipped 10/15/87

Shipment Service BAC

Airbill No. _____

Cooler No. _____

Relinquished by: *(Signature)* Mark Ebell	Received by: *(Signature)* CSB	Date/Time 10/15/87 5158
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-04-1838	SO-104-3	10/15/87	pH cond	
1839				
1840				
1841			TOC	
1842				
1843				
1844				
1845			TOC	
1846				
1847				
1848				
1849			Cl 96	
1850				
1851				

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

(4) _____

(5) _____

White - J. H. Kleinfelder & Associates Canary - Laboratory Courtesy Copy Pink - Sampler

CHAIN OF CUSTODY RECORD

SAMPLERS: *(Signature)* [illegible signature]

Phone:

SHIP TO: [illegible]

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper [illegible]

Address [illegible]

Date Shipped [illegible]

Shipment Service [illegible]

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
[illegible signature]	Diane Lincoln	10/15 4:55 p.m.
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)*	Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return original (white) copy to J. H. KLEINFELDER & ASSOCIATES, 901 W. Victoria Street, Suite G, Compton, CA 90220.

	Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
01	[illegible] 1718	[illegible]	[illegible]	[illegible]	
02	[illegible] 1791			[illegible]	
03	[illegible]			[illegible]	
04	[illegible] 1931			[illegible]	
05	[illegible] 1951			[illegible]	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated
(4)
(5)